POSTHUMOUS SEMEN RETRIEVAL AND REPRODUCTION: AN ETHICAL, LEGAL, AND RELIGIOUS ANALYSIS

BY

CATHERINE ROBEY

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Approved By:

Nancy King, J.D., Chair

John Moskop, Ph.D., Advisor

Beverly Snively, Ph.D.
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# Table of Contents

List of Tables ........................................................................................................................................ iv

Abstract .................................................................................................................................................. v

Introduction ........................................................................................................................................... vi

Chapter 1 – The History and Ethics of Semen Retrieval for Posthumous Reproduction .............................. 1

Chapter 2 – Legal Issues in Posthumous Reproduction ......................................................................... 19

Chapter 3 – Religious Perspectives on Posthumous Reproduction and Postmortem Semen Retrieval ......................................................................................................................... 35

Chapter 4: Conclusion and Reflection .................................................................................................. 51

References ............................................................................................................................................... 62

Appendix .................................................................................................................................................. 72

Curriculum Vitae .................................................................................................................................. 78
List of Tables

Table 1: Cases of Posthumous Sperm Retrieval by the California Cryobank

Data from California Cryobank from 1980 through September 2014 including: 1) year of retrieval procedure, 2) relationship of requestor of retrieval to the deceased, and 3) cause of death of deceased

Table 2: Summary of Procurements Performed by California Cryobank, 1980 through September 2014 by 5 year increments

Analysis of Table 1 data including number of procurements by five year-range as a percentage of all procurements
Abstract

Posthumous reproduction and procurement of semen has been a hot topic in the bioethics community due to its issues concerning possible violation of the interests of the deceased, welfare of the potential child, and possible moral conflicts experienced by physicians. The issue of consent is difficult to assess as the patient more than likely had not even considered the possibility of posthumous reproduction or sperm procurement. Many institutions are beginning to adopt policies regarding post-mortem sperm procurement. There are many issues that need to be taken into account prior to implementing such policies, including ethical debates, legal precedents, legal implications for posthumously conceived children, and even faith-based reasoning of many of those who may be considering retrieval as an option. Many institutions have adopted a restrictive approach to policy that would deny any requests without explicit written consent from the patient. I believe this may present more risks than benefits and therefore do not find it to be an optimal approach. Instead, I defend a more permissive, case-by-case approach to decision making in situations involving requests for post-mortem sperm retrieval.
Introduction

The rapid rate of technological advances in medicine has posed significant challenges to the field of ethics. Technology is advancing so rapidly that policy-making regarding these advances often seems to lag. This creates an issue when new technologies are implemented in advance of careful consideration of the ethical and policy questions that they raise. The advent of the capability for posthumous reproduction and postmortem gamete retrieval has puzzled many in the field of ethics due to the uncertain nature of posthumous reproduction interests and rights. Multiple commentators have defended different positions on the moral status of this practice.

On one side of the ethics debate, it is argued that posthumous gamete retrieval is a major violation of patient autonomy, due to the lack of consent by the gamete donor. Proponents of this argument include physicians Robert D. Orr and Mark Siegler, who state that “a request for sperm retrieval after death should not be honoured unless there is convincing evidence that the dead man would want his widow to carry and bear his posthumously conceived offspring”.¹ The opposing side argues that granting grieving families the hope of continuing the genetic legacy of a lost loved one is ethically permissible or even required, in an attempt to alleviate suffering. Dr. Cappy Rothman stands firmly by this view, stating that “it could actually be unethical to deny the hope and help available through sperm

¹ Orr and Siegler, 302
retrieval to a grief-stricken wife”. 2 Defenders of both positions offer persuasive arguments for their conclusions, but I believe that there are several other considerations to take into account in order to formulate policy about this practice.

I became interested in this topic during several of the courses I completed for the Wake Forest University Master’s Program in Bioethics. What struck me as most interesting was the hesitation of many of my peers in making a decision regarding posthumous gamete retrieval cases. The fear of making “the wrong choice” led to no decision in many of our cases. Consensus in cases involving posthumous gamete retrieval could never be achieved.

Prior to deciding on the topic of my thesis, I had the opportunity to speak with Dr. Cappy Rothman, the physician who pioneered posthumous gamete retrieval. Dr. Rothman performed the first recorded posthumous sperm retrieval in 1976 and has since performed numerous others. Dr. Rothman brought up several concerns regarding hesitation in recovery of the deceased’s sperm. He believes that a delay in the decision to recover sperm could result in preventable liability. For example, if a decision is made to go ahead with procurement, but the sperm are no longer viable, the requestor could hold the hospital liable. 3 Similarly, if the decision is made not to proceed, the requester could hold the hospital liable for preventing him or her from finding another hospital willing to do the procedure.

2 Rothman 1999, 456
3 Rothman 1999, 457
It is important to understand all of the reasons for eagerness in requests for this practice and hesitation in providing the practice, in order to draw a conclusion about its justifiability. Based on my research and discussion with Dr. Rothman, I believe it is important to not only discuss the ethical concerns, but also the legal and religious perspectives on posthumous reproduction and postmortem sperm retrieval.

In chapter one of the thesis, I will provide a brief history of posthumous reproduction and review the ethical considerations that have been offered for and against this practice. I will discuss ethical issues of patient autonomy, the welfare of the child to be, the interests of the requesting party, and the interests of the physician. The major opposition to posthumous reproduction and postmortem sperm retrieval in the context of patient autonomy rests primarily on the issue of the absence of explicit patient consent. Proponents of posthumous reproduction and postmortem sperm retrieval advocate for the permissibility of these practices in the absence of explicit refusal by the sperm donor, rather than the presence of explicit consent. With regards to the potential child, those who disagree with the practice argue that it is unethical to subject a child to the disadvantages that come with being part of a single-parent family. Advocates of posthumous reproduction argue that claiming the resulting child will be harmed by this practice implies that the child’s state of being alive would be worse than having never existed, which is not a convincing argument. Furthermore, I will discuss
arguments for and against physician rights to conscientious objection and how they apply to postmortem sperm procurement. Finally, I will evaluate different views on the interests of the requesting parties in their decision to request postmortem sperm procurement and posthumous reproduction.

In chapter two I will discuss legal cases involving the permissibility of posthumous reproduction, as well as one interpretation of the Uniform Anatomical Gift Act and its application to postmortem sperm retrieval. The cases of Parpalaix v. Cecos and Hecht v. Superior Court examined issues of donor intent as well as the fundamental right to procreate in their decisions regarding the permissibility of posthumous reproduction. In the case of In re Christy, the court ruled in favor of posthumous sperm recovery on the grounds that sperm is an anatomical gift that can be considered therapeutic under the Uniform Anatomical Gift Act. As the institutions involved in these cases had never considered the issues involved with postmortem sperm procurement and posthumous reproduction, it is important for current institutions to be aware of the possibility of receiving these requests.

In chapter three I will discuss religious views on posthumous reproduction in three faith traditions: Judaism, Islam, and Christianity. I will review religious doctrines regarding procreation, marriage, and death as well as religious opinions on assisted reproductive techniques in an attempt to demonstrate the variety of beliefs held within each tradition and how this variety may influence
choices about this practice by both intimate partners and health care professionals. The perspectives of each religion with regards to posthumous reproduction rely heavily on the definition of marriage and the importance of the family unit. Islam and Christianity believe that the death of the spouse terminates the marriage contract. The predominant view within Islam and Christianity is that reproduction should occur within marriage. Thus, posthumous reproduction is prohibited, as it would involve procreation outside the context of marriage. In contrast, although termination of the marriage occurs with the death of a spouse, procreation outside of wedlock is not discouraged as significantly in Judaism as it is in Christianity and Islam. Additionally, there is great emphasis on the commandment to procreate, so posthumous reproduction may be permitted in some cases.

In the final chapter, I will discuss the importance of considering ethics, law, and religion in future policymaking regarding postmortem sperm retrieval and posthumous reproduction. Physicians, requestors, and other involved parties will come from varying backgrounds. As such, it is important to be familiar with the possible opinions that could be encountered with the increasing number of requests. I will also discuss the data provided to me by Dr. Cappy Rothman from the California Cryobank. Although this is a limited sample, it may reflect future trends in requests for posthumous reproduction and postmortem sperm retrieval. The data provided involves cases of posthumous sperm procurement at his facility from 1980 through mid-2014. Finally, I will present and defend my own
position regarding the permissibility of posthumous reproduction as well as my stance regarding institutional policy regarding such cases. I will argue for a more permissive approach to policy making as I believe a more restrictive approach has the potential for greater harm.
Chapter 1 – The History and Ethics of Semen Retrieval for Posthumous Reproduction

This chapter will begin with a brief history of the practice of posthumous and perimortem sperm retrieval. Intimate partners or others may request sperm recovery for the purpose of posthumous reproduction either shortly before or after the death of a patient. Although the reason for the request is virtually the same in these two situations, the fact that one involves a procedure on a living patient and the other a procedure on a dead body makes the two situations significantly different from the moral point of view. In the rest of this thesis, I will limit my analysis to requests for sperm recovery from newly deceased patients. I will evaluate arguments for and against sperm recovery and posthumous reproduction using cryopreserved sperm. These arguments appeal to a variety of moral considerations, including patient autonomy, the welfare of the child-to-be, the interests of the requesting party, and the interests of the physician.

History and Methods of Posthumous and Perimortem Semen Retrieval

The cryopreservation of human sperm was first accomplished in 1953 by Sherman and Bunge. This result was made possible by Ernest John Christopher Polge’s discovery of the cryopreservative properties of glycerol on sperm from other animals. In addition to use in treatment of infertility, cryopreservation of sperm was offered for men in high risk professions who wanted their wives to be...
able to conceive in the event of their death.⁶ Cryopreservation of sperm for later reproduction is now prevalent among young male cancer patients who want their wives to be able to conceive in the event of infertility caused by their cancer treatments or their death, as “sperm cryopreservation prior to initiating life-saving cancer treatment offers men and their families the best chance to father biologically related children.”⁷ Many informed consent documents relating to these procedures include a clause with options regarding what should be done with the sperm in the event of the patient’s death, including use for posthumous reproduction. In these cases, living patients give prospective consent to posthumous reproduction with their preserved gametes.

The first recorded case of posthumous sperm retrieval was performed by Dr. Cappy Rothman in 1980.⁸ Since that time, the number of requests at his institution for posthumous and perimortem sperm retrieval have steadily increased. Similar trends were reported in a survey by Kerr et al. They found that over the 15 year span from the first recorded procedure in 1980 to 1995, 40 fertility clinics reported 82 cases of posthumous sperm retrieval requests, with the majority of those requests occurring between 1994 and 1995.⁹

There are a variety of methods for obtaining sperm from the recently deceased. These methods vary in their invasiveness to the deceased body. The more

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⁶ Lipskind and Ginsberg, 1
⁷ Williams, 1
⁸ Rothman 1980, 512
⁹ Kerr et al, 2155
invasive procedures include excision of the seminal vesicles via vesiculectomy, removal of the entire testicle via orchiectomy, and induced ejaculation via an electrical rectal probe. These procedures are considered more invasive to the body of the deceased as they involve open incisions or insertion of a probe into the rectum. Less invasive procedures include extraction of sperm via vasal aspiration, epididymal aspiration, and testicular sperm extraction. These procedures are perceived as less invasive as they involve only needle aspiration of the sperm from various locations of the seminal tract.

Arguments Limiting Permissibility of Posthumous Sperm Retrieval

Many physicians will only consider posthumous semen retrieval in the event of indisputable evidence of a patient’s consent to this procedure, such as prior written consent from the patient. Dr. Mark Dutras, a urologist who has performed two posthumous sperm procurements, states simply, “to be brief, if the deceased did not clearly specify their wish for postmortem reproduction, there is no further discussion.” Dr. Jay Sandlow, a urologist at the Medical College of Wisconsin, states that his team “require[s] prior written consent by the deceased, and this has to be passed through our hospital ethics committee.” For Dr. Robert Orr of the Vermont College of Medicine and Dr. Mark Siegler of the University of Chicago Maclean Center for Clinical Medical Ethics, “a request for sperm retrieval after death should not be honored unless there is convincing evidence

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10 Tash et al, 1922
11 Tash et al, 1922
12 Laborde et al, 467
13 Laborde et al, 467
that the dead man would want his widow to carry and bear his posthumously conceived offspring". Several moral arguments are commonly marshalled to justify denial of requests for sperm retrieval for posthumous reproduction. Among these, I will address what I think are the four main issues.

**Respect for Patient Autonomy**

Patient informed consent to treatment has become a foundation of legal and ethical medical practice. Without proper consent, any procedure could be viewed as an assault on an individual. The moral basis of the importance of consent is respect for patient autonomy. There are several ways to show respect for patient autonomy. Patients may provide oral or written consent at the time of a procedure, or written consent prior to the procedure if the patient is no longer able to advocate for him or herself when the procedure is under consideration. To respect the autonomy of a patient who is unable to communicate for him or herself, several information sources are considered. The first is an advance directive. If the patient has previously completed an advance directive, this is examined to determine whether or not the patient’s advance directive expresses the patient’s wishes regarding the treatment in question. If no written advance directive is available, the patient’s orally stated wishes, as reported by family and friends may be considered, as well as the patient’s recognized values.

Opponents of postmortem sperm procurement argue against reliance on proxy consent and substituted judgment. They conclude that surrogate decision makers

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14 Orr and Siegler, 302
should not be able to make this decision due to a clear conflict of interest: the procedure in question is of no benefit to the patient and is solely for the benefit of recipient of the sperm.\textsuperscript{15}

As noted above, there is an array of possible procedures for retrieval that vary in the level of invasiveness to the patient. Some procedures may have been refused by the patient had they been presented to the patient as an option during his lifetime. In arguments regarding patient autonomy, the invasiveness of the procedure is often considered due to the varying degrees of manipulation to the body. Proxy consent is often honored for other invasive procedures on the body of newly deceased patients, most notably, organ recovery and autopsy. Comparing the moral grounds for semen retrieval with proxy consent for organ donation or autopsy is controversial, however, as these three procedures serve three different purposes. Retrieval serves the interest of the requester’s desire to procreate, whereas organ donation serves to extend the lives of others anonymous to the decision maker, and autopsy entails determining cause of death.

Prospective, written consent for posthumous sperm retrieval is rare due to the nature of the cases involving the request. Many requestors of posthumous sperm retrieval are the surviving spouse or intimate partner of a young patient who died unexpectedly after a sudden and unexpected catastrophic illness or injury. Nearly all couples in this situation have not anticipated, discussed, or made any

\textsuperscript{15} Cannold, 387
provision for reproduction after the sudden death of one partner. Thus, these critics argue that, in most cases, posthumous sperm retrieval should not take place, because explicit prospective consent has not been given.

Commentators also raise questions about parenting in assessing the practice of posthumous sperm retrieval. Since the deceased are not able to “experience gestation or participate in rearing,” some critics argue that the requesting party cannot claim that it is her intent to continue the deceased’s wish to become a parent. According to John Robertson, professor of law at the University of Texas, a right to posthumous reproduction “can be said to exist only if posthumous reproduction implicates the same interests, values, and concerns that reproduction ordinarily entails.” Because the deceased are unable to experience child rearing, critics question whether this type of reproduction honors their “rights, interests, and concerns” regarding reproduction.

Welfare of the Potential Child

Partners request sperm retrieval for the purpose of eventual posthumous reproduction. This practice, therefore, may result in creation of a child and so raises questions about the welfare of that future child. Commentators have expressed several concerns regarding the welfare of the future child. One

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16 Ethics Committee of the American Society for Reproductive Medicine, 1843
17 Robertson, 1031
argument is the perceived harm of bringing a child into a single parent family.\textsuperscript{18} Bringing a child into a single parent family could put the child at a disadvantage compared with those who have both parents. According to the KIDS COUNT national database, children in single parent families are more likely to drop out of school, to have or cause a teen pregnancy, and to experience a divorce in adulthood.\textsuperscript{19} A survey by Daniel P. Mueller and Philip W. Cooper found that 35% of young adults raised in single parent families were either separated or divorced compared to 16% of those raised in traditional two parent families.\textsuperscript{20}

Additionally, single mothers are “usually found in the lowest income bracket” which subjects the child to economic stresses and potential resulting psychological stresses.\textsuperscript{21} Finally, it is argued that a child born as a result of posthumous reproduction may have his or her own psychological problems outside of financial stress. A child born via posthumous reproduction may experience a feeling of incompleteness due to not having a personal relationship with his or her biological father.\textsuperscript{22} Children conceived after the death of their biological father may also be legally disadvantaged in several ways. Many states have a time period within which a child must be born to be considered the legitimate child of the deceased. Illegitimate children may be denied access to

\textsuperscript{18} Strong et al, 741  
\textsuperscript{19} “Children in Single Parent Families”  
\textsuperscript{20} Mueller and Cooper, 173  
\textsuperscript{21} Gilbert, 539  
\textsuperscript{22} Gilbert, 539
social security survivor benefits as well as rights to estate. These legal issues will be addressed further in the next chapter.

*Interests of the Physician*

In considering the physician's ethical interests, the key concept is conscientious objection, also known as conscientious refusal. In medicine, conscientious objection refers to “the notion that a health care provider can abstain from offering certain types of medical care with which he/she does not personally agree.”\(^{23}\) Defenders of rights to conscientious objection argue that, as a moral agent, a physician’s morality “should not be infringed upon by dictates from the legislatures, medical community or patient interests.”\(^{24}\)

Rights to conscientious objection are well established in another reproductive medicine procedure, elective abortion. If termination of pregnancy conflicts with a physician’s moral convictions, he or she is often permitted by policy to refuse to perform that specific procedure. If physicians are able to conscientiously refuse to perform an abortion to which the patient consented and may be minimally invasive, consistency in the application of this right would seem to require that a physician should be allowed to refuse to perform a more invasive sperm procurement without patient consent. This argument is limited, however; it allows physicians to refuse requests for this procedure, but does not require them to

\(^{23}\) Bradley, 1
\(^{24}\) Bradley, 1
abstain from the practice. Some physicians do perform this procedure, as it does not violate their own moral integrity.

*Interests of the Requesting Party*

Critics claim that the requesting party is acting in a self-serving rather than altruistic manner and that her interest in reproduction using the patient’s sperm should not be honored without the explicit consent of her partner. For example, she may desire a child to secure inheritance from the decedent. This relates back to the idea that proxy consent for these types of procedures should be invalid, since the dominant interest is not the benefit of the patient, but that of the requestor. When compared to organ donation, one can make the argument that organ retrieval in the absence of explicit patient consent is permissible with familial consent because these organs are retrieved in order to provide the great benefit of extending the life of another person, and this benefit outweighs any possible harm to the patient. Orr and Siegler argue that sperm retrieval is not analogous to organ retrieval, because sperm procurement is primarily for the benefit of the requesting party.\(^{25}\)

*Arguments Supporting Permissibility of Posthumous Sperm Retrieval*

The arguments reviewed in the previous section appeal to a variety of reasons for restricting posthumous sperm retrieval. According to a recent survey report, however, “findings indicate that most Americans are supportive of posthumous

\(^{25}\) Orr and Seigler, 301
sperm retrieval and cryopreservation for reproductive purposes."\textsuperscript{26} These results may be indicative of opinion of the general population as the methods by which respondents were recruited enabled equal probability that any household in the United States would be called.\textsuperscript{27} What reasons might these survey respondents give for their favorable attitude toward posthumous sperm retrieval? Arguments in favor of this practice rest on several different moral claims.

\textit{Respect for Patient Autonomy}

In his response to Orr and Siegler, Professor Malcolm Parker of the Mayne Medical School in Queensland, Australia, appeals to a concept of collective intentionality to defend the practice of posthumous sperm retrieval. Parker argues that "procreative desires … are better understood in terms of … collective intentionality: within the mind of each potential parent there exists the same primitive collective intention – 'We desire to be parents.'\textsuperscript{28}" He argues further that this mutual desire would "survive the death of one partner."\textsuperscript{29} Thus, he concludes that sperm procurement in the absence of explicit patient consent can be ethically justifiable if procreation had been a desire when both partners were living.

Although this concept of collective intentionality supports a mutual desire of couples to procreate, it does not necessarily follow that the deceased wished to

\begin{footnotes}
\item \textsuperscript{26} Hans and Yellend, 8
\item \textsuperscript{27} Hans and Yellend, 8
\item \textsuperscript{28} M Parker, 391
\item \textsuperscript{29} M Parker, 391
\end{footnotes}
be a *posthumous* parent. Posthumous parenting entails only the recovery and use of one’s genetic material for procreation, whereas social parenting additionally involves the experience of child rearing. There are many reasons why people desire to procreate. Among these include the desire to create a child as evidence of a loving relationship, which I believe is the primary reason intimate partners wish to procreate with the gametes of the deceased. This may be viewed as selfish, but I contend that it is actually less selfish than other reasons why people choose to reproduce, including having someone to take care of them when they get old or ensuring continuation of the family name.

It may be reasonable to assume that what survives death is the spouse’s love for his partner and support for her procreative desires. Therefore, prohibiting postmortem sperm retrieval due to the fact that the deceased may not want to be or may not even have considered becoming a posthumous parent risks violating a presumed wish of the deceased to support the desires of his partner. Additionally, it is not necessarily justifiable to deny the wishes of the living based on uncertainty of the wishes of the deceased.

Other patient autonomy arguments in favor of posthumous sperm retrieval conclude that prior consent is an unreasonable criterion due to the unexpected nature of the deaths of these patients. Carson Strong, for example, points out that medical decisions in several situations, including emergencies and loss of mental capacity, “must be made in the absence of explicit prior consent,” and
thus, “making decisions based on the inferred consent of the patient is recognized as a way to respect patient autonomy.”\(^{30}\) This example may not be directly analogous to postmortem sperm retrieval, as the patient does not directly benefit from retrieval, but Strong concludes that “explicit prior consent is not necessary for the ethical justifiability of sperm retrieval following death; provided it is reasonable to infer that the man would consent if he were able to do so.”\(^{31}\)

With regards to organ donation, consent from a proxy in the absence of explicit consent for organ donation does not directly benefit the patient and is still a common occurrence. I recognize that sperm retrieval and organ donation are not completely analogous, as those consenting to donation of organs are doing so for the benefit of an anonymous recipient in order to save their lives. However, the procedure of postmortem semen retrieval itself is not a convincing deterrent with regards to patient autonomy as none of the procedures are nearly as disfiguring to the body as autopsy or organ donation which are often permitted without prior consent of the patient.

Kelton Tremellen and Julian Savulescu propose an even stronger pro-retrieval position. These authors defend a default position of presumed consent in the absence of explicit refusal, rather than presumed refusal in the absence of explicit consent.\(^{32}\) Tremellen and Savulescu appeal to two surveys: one survey of men who have cryogenically preserved their sperm and another survey of

\(^{30}\) Strong et al, 742
\(^{31}\) Strong et al, 742
\(^{32}\) Tremellen and Savulescu, 8
couples currently trying to conceive. Over 90% of both survey populations supported the right of the wife to posthumous conception in the event of the death of the husband. Though these samples may not be representative of the general population, they do indicate a desire of men who are interested in reproducing to honor their partners’ wishes even after their own death. They argue that this data suggests that “most men surveyed actually support their partners having access to their sperm in death” and reject the claim that this would be a “failure to respect their past autonomy.”

Welfare of the Potential Child

Dr. Cappy Rothman, Co-Founder and current Medical Director of the California Cryobank, granted me access to data from the bank, including the number of cases in which post-mortem sperm procurement was done by practitioners of the California Cryobank and the number of cases that went on to conception. The data provided indicates that only 2 of the 148 cases went on to attempted conception. This suggests that although reproduction may be the primary reason for requests for posthumous sperm retrieval, it is not a frequent result of that procedure. If this trend proved to be consistent with other samples, then the welfare of the potential child may not be a primary consideration, as it is unlikely that there will be a child.

33 Pastuszak et al and Nakhuda et al
34 Tremellen and Savulsecu, 8
Recognizing, however, that reproduction is the stated reason for and a possible outcome of sperm retrieval and that the number of posthumously conceived children may increase with increasing requests, the interests of children conceived with posthumously retrieved sperm should be considered. Strong asserts that prohibiting this practice on the basis of harm to the child “amounts to saying that the children are worse off than they would have been if they had not been created.”35 This raises the issue of wrongful life, the claim that being born is in some way an injury to the child, and that he or she would be better off not to have been born at all.36 Children with serious diseases and disabilities nevertheless have lives worth living, and so wrongful life is a convincing claim only for children with the most catastrophic conditions. It is not a sufficient reason for refusing to permit a person to reproduce when the risks to the child are relatively minor, since that child’s life will still be clearly worth living. Although single parenthood may put the child at some sort of disadvantage, it is not persuasive to state that the child will definitely be disadvantaged. A child conceived naturally by two parents may also have conditions that put him or her at a disadvantage, or he or she may be born into an abusive household. It is not enough to say that a possible disadvantage should prohibit a child from being born. Some posthumously conceived children will be predictably disadvantaged by illegitimacy and inability to qualify for social security survivor benefits or inheritance, compared to children whose fathers are alive and who thus qualify for these benefits. I believe this disadvantage is outweighed, however, by the

35 Strong et al, 741
36 Burns, 808
benefit to these children of bringing them into existence. Furthermore, most current protocols permit sperm procurement in the presence of explicit consent. This indicates that the welfare of the child is actually not “the pivotal block” to such procedures for current opponents to the practice, but rather the issue of consent.\textsuperscript{37}

\textit{Interests of the Physician}

Although physician rights to conscientious objection are widely recognized, Julian Savulescu argues that conscientious objection does not belong in the medical field. The main idea behind this claim is that conscientious objection fosters inefficiency and inequity in medicine. Practicing conscientious objection can lead to “inefficiency and wasting resources” and, even more troubling, “it means that some patients, less informed of their entitlements, will fail to receive a service they should have received.”\textsuperscript{38} Another argument rests on the idea that “to be a doctor is to be willing and able to offer appropriate medical interventions.”\textsuperscript{39} To apply these claims to posthumous sperm retrieval, of course, one would have to establish that this is a service people \textit{should} receive, and therefore physicians may not conscientiously refuse to provide it. Even if physicians’ conscientious refusals to perform sperm recovery are respected, allowing sperm recovery respects the professional autonomy interests of those other physicians who have made a conscientious decision to provide this service for requestors.

\textsuperscript{37} Tremellen and Savulescu, 8
\textsuperscript{38} Savulescu, 294
\textsuperscript{39} Savulescu, 294
Interests of the Requesting Party

In some instances of the sudden death of a spouse or intimate partner, the surviving partner wishes to have the possibility of bearing the deceased partner’s biological child, perhaps as a way of continuing the legacy of her lost loved one or of fulfilling their shared desire to have children. As the spouse or intimate partner of the deceased, she is arguably in the best position to know and express what he would want.

I suggest that the expressed interest of some surviving partners in reproduction is not unreasonable and so ought to be considered in conjunction with the inferred interests of the deceased. Although the deceased may not have considered the possibility of posthumous reproduction or sperm procurement, the surviving partner may still wish to continue with her life-plan, which may involve having a child by her partner. Dismissing this desire on the basis that the deceased may not have considered it an option unfairly deprives the surviving spouse of continuing her life-plan. This view is supported by the Ethics Committee of the American Society for Reproductive Medicine in its recent statement that the “desire of a surviving partner to have a child with the gametes of the deceased, in light of their intention to have a family together, may be viewed with sympathy.”

There are strong cases on both sides regarding the permissibility of posthumous sperm retrieval and reproduction at the request of a surviving partner. For several reasons, however, I believe that the weaker of the two positions is the position

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40 Ethics Committee of the American Society for Reproductive Medicine, 1844
that limits posthumous sperm retrieval and reproduction to cases in which the male partner provides explicit prospective consent for these procedures. First, posthumous sperm procurement is generally permitted when the deceased gives his explicit permission. Since posthumous reproduction is in fact permitted in these cases, any negative outcome for the future child born into a single parent family is presumably outweighed by the consent of the father for procurement and eventual reproduction. Therefore, I contend that cases involving substituted judgment should not be dismissed based solely on the welfare of the potential child, but should rather be evaluated based on evidence regarding the wishes of the deceased person.

Secondly, in the largest data sample I was able to analyze, fewer than 2% of cases of procurement eventually went on to insemination and birth. This sheds light on the idea that requests for posthumous retrieval may have the primary purpose of reproduction but end up serving a secondary therapeutic purpose, that is, to comfort the grieving person.

With regard to the autonomy interests of the deceased patient, I believe that it is important to recognize that surrogate decision-making is often utilized in organ donation, autopsy, and other decisions about the disposition of the body after death. Both organ donation and autopsy include extensive open incisions and bodily disfigurement, whereas several effective methods of sperm procurement have only very small or no incisions at all. Furthermore, allowing a surrogate decision maker to make a decision in accordance with his or her judgment about the patient’s wishes in donating organs or agreeing to autopsy, but not in
reproduction, seems inconsistent. I believe that the patient’s authorized surrogate decision maker would be as likely to know and express the patient’s wishes regarding posthumous reproduction as he or she would know and express the patient’s wishes about autopsy, and therefore I am inclined to rely on those surrogate judgments. Furthermore, although the Ethics Committee statement for the American Society for Reproductive Medicine cautions about the possible harm involved with posthumous retrieval of sperm and reproduction, the Committee reaches a fairly sympathetic conclusion regarding the honoring of partner requests for retrieval when there is consent by the deceased or the request is made by the surviving spouse or partner. Finally, in response to the interest of the physician, I believe physicians should be able to evaluate their own ethical positions and make a decision based on these positions either for or against provision of these procedures. In Chapter 4, I will consider how this position can be reflected in health facility policies regarding posthumous sperm retrieval.
Chapter 2 – Legal Issues in Posthumous Reproduction

In the United States' federal system of government, legislation regarding health care is deferred to the states. There is, therefore, no federal legislation on the practice of posthumous sperm retrieval, and no state has chosen to enact specific legislation on this topic. What legal guidance there is regarding the practices of postmortem sperm retrieval and posthumous reproduction is thus based primarily upon case law. Existing court decisions have established a fundamental right to procreate as well as a right to assisted reproductive technologies, both of which are involved in posthumous reproduction. The right to reproduce was recognized with the expansion of “constitutional protection to all procreative sexual intercourse, not just sex between married partners.”41

In my research, I was unable to find appellate cases involving posthumous sperm retrieval specifically, which I believe may be directly related to the time sensitive nature of procurement. There are, however, cases involving the right to reproduce posthumously as well as an interpretation of the Uniform Anatomical Gift Act as it relates to posthumous sperm retrieval. In this chapter I will discuss these cases, and I will briefly consider the legal status of posthumously conceived children regarding social security benefits and inheritance. I believe these aspects are all important to consider, as the legal implications of posthumous sperm procurement and reproduction may influence both requests and provider responses.

41 JUSTIA
The issue of rights to previously donated sperm was never considered by law until the 1980's.\textsuperscript{42} It is now a common occurrence for cancer patients undergoing chemotherapy and radiation to bank their sperm in the event that they become infertile following treatment. The purpose of this banking is for future consideration of reproduction. In the event that the donor dies, what happens to the sperm? There have been several cases involving the use of banked sperm for reproduction following the death of the donor. Many sperm banks include a statement in their consent form regarding what will to be done with the sperm in the event of the death of the donor. In some instances, this has served to minimize questions surrounding who determines whether and how the sperm is used. However, not all cases of sperm banking address the fate of the sperm following the death of the donor.

Cases Involving the Legality of Posthumous Reproduction

\textit{Parpalaix v. CECOS}

\textit{Parpalaix v. CECOS} is a 1983 French court decision widely cited in U.S. cases involving posthumous reproduction.\textsuperscript{43} Alain Parpalaix had previously deposited sperm at a sperm bank prior to undergoing treatment for testicular cancer.\textsuperscript{44} At the time he deposited his sperm, Parpalaix was in a long-term relationship with his girlfriend Corinne and had banked his sperm with the intent that he and Corinne would be able to use it if he became infertile following his cancer.

\textsuperscript{42} Shapiro, 229  
\textsuperscript{43} Parpalaix v. CECOS  
\textsuperscript{44} Shapiro, 229
treatment.\textsuperscript{45} However, the contract that Parpalaix signed with the sperm bank, Centre d’etude et de Conservation du Sperme (CECOS), did not address what should be done in the event of his death.\textsuperscript{46} Parpalaix did indeed pass away as a result of his cancer, two days after he married Corinne. When she requested that Centre d’etude et de Conservation du Sperme allow her to have the sperm for purpose of insemination, the Centre director refused, stating that “no law mandated return of the sperm”. Instead, he requested that she “turn the case over to the Ministry of Health for a legal ruling on the matter.”\textsuperscript{47}

The parties in this case disagreed about the legal status of this banked sperm, and whether it could be treated as a type of property. For the Parpalaix family, Alain’s sperm should be considered a “divisible part of the body” and as such should be “subject to property laws governing movable objects.”\textsuperscript{48} According to Article 1939 of the French Civil Code, “in the case of the death of the person that made the bailment, the thing bailed may be returned only to his heir.”\textsuperscript{49} In legal terms, bailment is a “non-ownership transfer of possession.”\textsuperscript{50} In this context, the bailer would be the deceased patient who transferred his sperm to a bank, the bailee, without giving ownership rights to the bank. The Parpalaix family appealed to this article as their main argument for their rights to the deceased’s sperm. For the Centre d’etude et de Conservation du Sperme, the sperm should

\begin{thebibliography}{50}
\bibitem{Katz} Katz, 684
\bibitem{Katz} Katz, 685
\bibitem{Katz} Katz, 684
\bibitem{Katz} Katz, 685
\bibitem{Shapiro} Shapiro, 230
\bibitem{Wex} http://www.law.cornell.edu/wex/bailment
\end{thebibliography}
be considered an "indivisible part of the body much like a limb, an organ, or a
cadaver and is therefore not inheritable absent express instructions." Although
indivisible, the Centre d’etude et de Conservation du Sperme argued that sperm
should be treated even more carefully than a limb or organ based on its potential
to create life and thus standard rules of property did not apply. The Centre
d’etude et de Conservation du Sperme claimed they only had legal obligations to
the donor, and since there was no mention in the contract of what should be
done with the sperm in the event of Alain’s death, they should not turn over the
sperm.

Ultimately, Corinne Parpalaix was given the right to her deceased husband’s
sperm. However, the court disagreed with both arguments regarding sperm as
property. In addressing the Parpalaix’s claim that Alain’s sperm was divisible and
thus inheritable, the court stated that “it was impossible to categorize human
sperm as movable, inheritable property within the contemplation of the French
legislative scheme” as other aspects of the code did not apply to human sperm.
Therefore, the Parpalaix family could not claim a legal right to the sperm based
on inheritability. In response to the Centre d’etude et de Conservation du
Sperme, the court stated that the fundamental right to conceive or not to
conceive “is not to be subjected to the rules of contracts.” Thus, based on the
fundamental right to procreate and Alain’s depositing of the sperm for the

51 Shapiro, 231
52 Katz, 685
53 Shapiro, 232
54 Shapiro, 232
purpose of procreation with Corinne Parpalaix, Corinne was granted rights to her deceased husband’s sperm for the purpose of insemination.

It is important to take away from this case that this French court ruled that whether sperm is a kind of property should not determine whether it may be used for posthumous reproduction. The basis of the court's decision was the fundamental right to procreate as well as evidence regarding the sperm donor’s intent, and the decision was cited by one of the first US court decisions addressing the issue of posthumous reproduction.

*Hecht v. Superior Court*

A 1993 California decision was one of the first US court decisions to address the issue of posthumous reproduction using cryopreserved sperm. Prior to taking his own life, William Kane deposited 15 vials of sperm at the California Cryobank. He signed a specimen storage agreement with the bank that explicitly stated in the event of his death he consented to release of his sperm to his girlfriend, Deborah Hecht, or to her physician for the purpose of insemination, if Hecht wished to do so. He additionally filed a will with the Los Angeles Superior Court bequeathing any and all stored sperm to Hecht for procreation of their child. He furthermore willed much of his estate to Hecht and the remainder to his two adult children. Following his death, Hecht and Kane’s two adult children signed a distribution agreement regarding Kane’s estate. Hecht later approached the sperm bank requesting Kane’s sperm, but the bank refused her request as it was

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55 *Hecht v. Superior Court*
not clear who had rights to the sperm, per the signed agreement between Hecht and Kane’s children. Kane’s children requested the destruction of Kane’s sperm. This order was upheld by the Los Angeles Superior Court, and that decision was then appealed by Hecht. Both parties appeared before the California Court of Appeals to state their cases. Kane’s children argued that Kane could not will his sperm to Hecht as he had “no ownership or possessory interest in his sperm once it had left the body.”56 They further argued that public policy “forbids artificial insemination of an unmarried woman” as well as postmortem insemination.57 Their final argument was that of psychological distress for their family if Hecht were to conceive Kane’s child.58 On the other hand, Hecht argued that the sperm was willed to her, and therefore “neither the state nor the Kanes had any property interest” in it.59 She further argued that if the sperm were to be considered part of the estate, she should still be given possession because “(1) the will specifically authorizes that she be the sole beneficiary of the sperm; and (2) to destroy the sperm against her wishes would be a violation of her rights to privacy and procreation under the federal and California Constitutions.”60

The court ruled in favor of Deborah Hecht, relying substantially on the Parpalaix case for guidance as it was “instructive and pertinent to the case at bar.”61 The court found no basis for the Kanes’ claim that public policy prohibited artificial

56 Hecht v. Superior Court 847.
57 Gilbert, 40
58 Gilbert, 41
59 Gilbert, 41
60 Gilbert, 41
61 Gilbert 41
insemination of an unmarried woman, citing several cases reaching the opposite conclusion.\(^{62}\) The court further found no basis for the Kanes’ claim that postmortem insemination was against public policy or that conception of a child would cause psychological harm to the family.\(^{63}\) The court decided that since “intent is present, it is the gamete providers’ decision to use their gametes as they wish and the government may not violate this right to procreate.”\(^{64}\) Thus, Hecht was entitled to possession and use of Kane’s sperm for procreation.

In these court decisions, evidence of donor intent was the basis for granting rights to already procured sperm to wives and girlfriends of the deceased. Although explicit written consent was not given in the Parpalaix case, the act of banking the sperm for later reproductive use was evidence enough for the court to interpret as implied consent to posthumous reproduction at the request of the surviving spouse.

These specific cases involving already banked sperm are not time sensitive, as sperm has already been cryogenically preserved and thus risk to sperm viability is minimal. In the case of procurement from the newly deceased, time is a major factor. The longest recorded time period from death to procurement of viable sperm that I have been able to find is 36 hours.\(^{65}\) Without further information on the maximum time interval from death to procurement of viable sperm, it is best

\(^{62}\) Gilbert, 41
\(^{63}\) Gilbert, 41-42
\(^{64}\) Gilbert, 42
\(^{65}\) Shefi et al, 2891
to err on the side of caution and assume that extraction of viable sperm from the deceased is time sensitive. Three days may not be sufficient for a case to be decided in court in time for sperm recovery to take place.

Cases Involving the Legality of Postmortem Sperm Procurement

*In re Christy*

Daniel Christy was a 23 year old who suffered severe head trauma as a result of a motorcycle accident in Iowa on September 9, 2007. At the request of his fiancée, Daniel’s parents, as his medical agents, asked to have his sperm retrieved for eventual reproduction. The hospital refused to fulfill their request without a court order, so they filed a request. On behalf of Daniel’s family, Professor Sheldon Kurtz, the principal drafter of the Uniform Anatomical Gift Act, sent an affidavit to the court advocating use of the Uniform Anatomical Gift Act in favor of fulfilling the request for sperm donation. Professor Kurtz claimed that instances regarding posthumous sperm retrieval were “contemplated by the (law’s commissioners) in adopting the new Uniform Anatomical Gift Act”, and procurement of Daniel’s sperm “with the intention to direct donation to his fiancée is legally permissible under the Iowa Act.”

*Uniform Anatomical Gift Act (UAGA)*

The court in the case of Daniel Christy came to the same decision as *Parpalaix v. CECOS*, though it used the Uniform Anatomical Gift Act to argue that sperm

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66 Spielman, 332  
67 Spielman, 332  
68 Fiegen, 1
could be made as an anatomical gift despite its reproductive potential. The Uniform Anatomical Gift Act has been enacted by 46 states (including North Carolina), the U.S. Virgin Islands, and the District of Columbia.\footnote{Uniform Law Commission 2006, 1} The Uniform Anatomical Gift Act distinguishes between “the donor” and “the decedent.” The donor is the person who either consents to donation of his or her own body parts or the person who has authority to consent to donation of the body parts of another individual.\footnote{Martinez, 1} The decedent is the person from whom the body parts are procured for donation.\footnote{Martinez, 1} This is an important clarification as it explains that the donor is not necessarily the person from whose body the donation is procured. In addition to this distinction, the Anatomical Gift Act consists of twenty-seven sections addressing questions of “who, what, where, when and why” regarding anatomical gifts. In this chapter, I will focus on the ninth and eleventh sections, which discuss who may serve as a donor, who may be the recipient of an anatomical gift, and for what purpose an anatomical gift may be made.

SECTION 9. Who May Make Anatomical Gift of Decedent’s Body or Part.\footnote{Uniform Law Commission 2006, 32}

Section 9 prioritizes who may make an anatomical gift in the absence of previous consent or signed refusal by the decedent regarding donation of the whole or part of the body. First priority goes to “the agent” at the time of death of the decedent.\footnote{Uniform Law Commission 2006, 32} The act defines the agent as “an individual authorized to make health care decisions on the principal’s behalf by a power of attorney for health care, or
expressly authorized to make an anatomical gift on the principal’s behalf by any other record signed by the principal.”

In the absence or unwillingness of an agent to make a decision, the spouse of the decedent may make decisions regarding anatomical gifts. In the absence or unwillingness of the spouse, decision making responsibility falls upon, in order or priority, adult children of the decedent, parents of the decedent, adult grandchildren of the decedent, grandparents of the decedent, special caregiver of the decedent, person acting as guardian at time of death, and finally any other individual with authority to dispose of the body at time of death.

In the event that sperm is in fact considered a body part, the donation may be made by the agent followed by the spouse. This is of course in cases where there are explicitly designated agents who are not the spouse. In most cases, the spouse is the decision-maker. Analyses based on a longitudinal study in Wisconsin of 10,317 men and women showed that 79.6% of married patients chose their spouses as health care agents. This suggests that, when a health care agent is designated, the spouse is the agent in most cases, and thus usually has priority in anatomical donation decisions.

SECTION 11. Person That May Receive Anatomical Gift; Purpose of Anatomical Gift

74 Uniform Law Commission 2006, 10
75 Uniform Law Commission 2006, 32
76 Uniform Law Commission 2006, 32
77 Carr et al, 185
Section 11 divides potential recipients into three groups. Part (a) (1) lists medical and dental schools, hospitals, colleges and universities, organ procurement centers and other appropriate individuals as potential recipients for research or educational purposes.\(^78\) Part (a) (2) states that individuals “designated by the person making the anatomical gift” may be recipients of anatomical gifts if that individual will be the recipient of that part for therapeutic or transplantation purposes.\(^79\) Part (b) addresses anatomical gifts that cannot be directly transplanted into the individual.\(^80\) Part b) is subject to subsection g) which states that if an anatomical gift cannot be transplanted into the individual, custody then passes to an eye bank, tissue bank, or organ procurement organization.\(^81\) Part (c) lists eye or tissue banks as additional potential recipients.

The Uniform Anatomical Gift Act defines tissue as “a portion of the human body other than an organ or an eye.”\(^82\) As sperm is in fact a portion of a man’s body, under this definition sperm would be considered tissue. This claim is further supported by the Uniform Anatomical Gift Act in the comments in the revised 2006 Act explaining that sperm specifically is in fact tissue based on opinion by the medical experts advising the committee in charge of drafting the act.\(^83\) As tissue can be donated to an individual under Section 11 part b), an agent could in

\(^78\) Uniform Law Commission 2006, 38
\(^79\) Uniform Law Commission 2006, 38
\(^80\) Uniform Law Commission 2006, 38
\(^81\) Uniform Law Commission 2006, 39
\(^82\) Uniform Law Commission 2006, 13
\(^83\) Uniform Law Commission 2006, 17
fact allow for donation of sperm to an individual provided that it is used for transplantation or therapeutic purposes. The Uniform Anatomical Gift Act does not define what it considers to be a transplantation. One definition of transplantation is “the removal and grafting of one individual’s body part into the body of another individual.”84 Under this definition, neither artificial insemination nor IVF would constitute transplantation. As such, sperm donation by an agent to a spouse or partner for reproductive purposes would not be considered permissible under the definition of transplantation.

However, the Uniform Anatomical Gift Act does not define what constitutes therapy. Proponents of posthumous sperm procurement argue that granting grieving families the hope and possibility of continuing the genetic legacy aids in the grieving process, regardless of whether or not eventual procreation occurs. Thus posthumous procurement of sperm for the family could be considered therapeutic for mental distress. Additionally, therapy could be interpreted as a physical intervention, such as assisted reproduction or in vitro fertilization. If so, these “therapies” would be included as therapeutic purposes cited in the Uniform Anatomical Gift Act. It is this interpretation of therapy that was used to make a decision in the case of Daniel Thomas Christy.

Judge Martha Beckelman ruled in favor of the family’s request, stating “Under the act, an anatomical gift, including the gift of sperm, can be made by the donor, or, if the donor did not refuse to make the gift, by the donor’s parents following the

84 Spielman, 334
Beckelman appealed to the sections of the anatomical gift act that I have described in the previous section. She concluded that under the Uniform Anatomical Gift Act, tissue was defined in such a way to include “sperm as something that may be donated and that Daniel’s parents were authorized to make such an anatomical gift.”

One review of this case by Dr. Bethany Spielman, director of the Program in Medical Ethics at Southern Illinois University School of Medicine, cites a “common usage” of the term ‘transplantation’ to be “the removal and grafting of one individual’s body part into the body of another individual.” Spielman reports that Beckelman’s decision did not interpret artificial insemination to be considered transplantation. Instead, she cites the inclusion of reproduction as a therapeutic purpose as the foundation of Beckelman’s decision. Since the Uniform Anatomical Gift Act does not define therapy, Judge Beckelman’s decision implied an interpretation of the concept of therapeutic purpose to include reproductive treatments. The most important consequence for the practice of posthumous sperm recovery in this decision is Judge Beckelman’s interpretation of the Uniform Anatomical Gift Act that procurement is permissible “if the donor did not refuse to make the gift.” Instead of refusal in the absence of explicit prior consent, Beckelman advocates for authorization in the absence of explicit refusal.

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85 Fiegen, 1
86 Spielman, 333
87 Spielman, 334
88 Spielman, 334
89 Spielman, 334
This interpretation of the Uniform Anatomical Gift Act grants posthumous sperm procurement and donation to the spouse/partner in the event that the authorized "agent" consents to donation and use, as sperm is specified in the Act to be considered as a possible anatomical gift. Individual use of sperm for procreation is legally acceptable under this interpretation, as assisted procurement and reproduction fall under the requirement of therapeutic purpose.

Nikolas Evans

In March of 2009, Nikolas Evans sustained a fatal blow to the head after being pushed to the ground outside of a bar in Texas. His mother, Missy Evans, requested that his sperm be harvested for use in subsequent reproduction on the basis of many conversations they had had about him wanting to have children. She applied for an emergency court order to allow for the retrieval of the sperm, and Probate Judge Guy Herman ruled in favor of her request.

This case has two major differences compared to the previous ones. First, the requestor of the sperm was not a romantic partner of the deceased. Second, the requestor would not be using the sperm herself to reproduce. Missy Evans discussed enlisting the help of an egg donor as well as a gestational surrogate in order to bring Nikolas’s biological children into the world.

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90 Plohetski
91 Plohetski
92 Plohetski
93 James
There is no publicly available transcript of this decision, as it is a probate case.

As I will discuss in my final chapter, I believe that the burden of proof regarding the decedent’s wish to reproduce increases as the method of reproduction digresses farther from traditional sexual reproduction, so it would be interesting to know what the judge considered sufficient evidence for consent in this case.

It is interesting to note that although the cases discussed above came to similar conclusions, they did so by very different reasoning. In Parpalaix v. Cecos sperm was not considered a tissue to be used for anatomical gifting. Whereas, in the case of Daniel Christy, the sperm was considered an anatomical gift by interpretation of the Uniform Anatomical Gift Act. The case of Daniel Christy introduced the idea of presumed consent in the absence of explicit refusal, which was also enough evidence for permitting sperm retrieval in the case of Nikolas Evans. Both Parpalaix v. CECOS and Hecht v. Superior Court relied less heavily on donor intent and more heavily on the fundamental right to procreate. This right paired with enough evidence for intent has been enough to allow posthumous reproduction.

None of these cases, however, explicitly addressed the issue of the legitimacy of a posthumously conceived child. Current legislation in the 9 states that have enacted the Uniform Parentage Act states that with regard to posthumous reproduction, “the deceased individual is not a parent of the resulting child unless the deceased spouse consented in a record that if assisted reproduction were to
occur after death, the deceased individual would be a parent of the child." This legislation excludes children conceived posthumously without the explicit prospective consent of the deceased genetic parent from any paternal inheritance, social security survivor benefits, or other legal recognition of the donor as the child’s father. Although only 9 states have enacted the Uniform Parentage Act, other states have their own laws regarding the legitimacy of posthumously conceived children. The Supreme Court, in the case of Astrue v. Capato, deferred to the state intestacy laws regarding social security survivor benefits for posthumously conceived children. For example, in the state of North Carolina “lineal descendants and other relatives of an intestate born within 10 lunar months after the death of the intestate shall inherit as if they had been born in the lifetime of the intestate and had survived him.” This excludes all children born after 10 months, which is the majority of posthumously conceived children as they must go through assisted reproductive technologies as well as waiting and grieving periods enacted by some institutions before use of samples retrieved from recently deceased men.

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94 Uniform Law Commission 2006, 67
95 Astrue v Capato
96 North Carolina General Statute § 29-9
Chapter 3 – Religious Perspectives on Posthumous Reproduction and Postmortem Semen Retrieval

It is important to consider religious perspectives in bioethics, as religious beliefs have a large influence on the opinions and decisions of the members of different faith communities. Even within a single faith tradition, there may be multiple opinions or approaches to topics in bioethics. It is important for patients and practitioners alike to understand that individual religious views may or may not have a strong influence on what kinds of therapies patients are willing to undergo as well as what therapies practitioners are willing to perform. I believe that taking different religious perspectives into consideration when evaluating the permissibility of a certain procedure will aid in understanding that there may not be one right answer and decisions may require case-by-case analysis. Furthermore, taking into account this variety of attitudes towards posthumous reproduction and postmortem sperm retrieval may establish the need for a more open approach to institutional policymaking. In this chapter, I will examine Islamic, Christian, and Jewish moral doctrines and practices relating to family and to procreation. I will also discuss statements by religious authorities and faith-based medical associations regarding posthumous reproduction and the implications of these doctrines and statements for postmortem sperm procurement.

Islamic Perspectives
The religion of Islam is characterized more by practice and law than it is by religious doctrine. That is, there are no binding or universal interpretations of the Quran, and each Muslim is advised to interpret it in a way that aligns with the 5 pillars of Islam, the practices needed for a Muslim to live a good life. These are profession of faith, worship, almsgiving, fasting during Ramadan, and pilgrimage to Mecca. Although there are varying interpretations among scholars and different modes of practice, these interpretations are all still considered to be "genuinely Islamic." Because issues of assisted reproductive technologies are fairly new and not addressed explicitly in the Quran, interpreters of Islamic law have taken the lead in advising whether these practices are permissible.

Before discussing Islamic views on assisted reproductive technologies, including posthumous reproduction, it is helpful to discuss some Islamic beliefs involving marriage and procreation. The family unit is of utmost importance in Islam, as it serves to fulfill the basic objectives of “protection and preservation of life, religion, intellect, progeny, and property.” The preservation of progeny is highly emphasized because proper lineage is the basis of family law in Islam. Additionally, progeny is listed in the Quran as one of the main gifts bestowed by Allah, so continuing one’s family line is considered sacred. Proper continuation of one’s lineage can only be achieved within a marriage, as procreation within marriage is the only way to ensure that the child is of the father’s descent.

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97 PBS
98 Glazov
99 Fadel, 75
100 Fadel, 74
101 Quran, 18:46
According to Al-Qaradawi, “there is no way a real or proper family could ever exist out of wedlock, the way that has been legislated by Allah.”102 Because marriage is controlled by rules and by mutual rights and responsibilities of one spouse to another, children should only be born “under this protective umbrella.”103 Children born out of wedlock are often subjected to “stigmatization and loss of respect.”104 The child lacks proper lineage and as a consequence can be subject to abuse and “serious violation of human rights.”105 Marriage serves as a protective barrier for children as it preserves their lineage and dignity within Islam and follows the instruction of Muhammad to “provide a good upbringing so that the child grows up to become a virtuous and healthy member of the family and society.”106

In the event that a married couple is unable to conceive, Muslims are permitted to utilize all lawful means to ensure continuation of their lineage. What is considered lawful is open to interpretation. Some scholars argue that assisted reproductive technologies that take away from the natural act of conception are contrary to God’s plan for creation and additionally blur the validity of the resulting child’s lineage.107 Others see infertility as a disease that deserves proper treatment, which includes assisted reproductive technologies. A statement by the Islamic Organization for Medical Sciences asserts that assisted

102 Al-Qaradawi
103 Fadel, 151
104 Sachedina 107
105 Sachedina 107
106 Sachedina 107
107 Sachedina 111
reproductive technologies are only permissible “if they are performed in the context of an intact marriage.”\textsuperscript{108} Similarly, the Islamic Medical Association of North America makes the claim that “all forms of assisted reproductive technologies are permissible between husband and wife … using the husband’s sperm and the wife’s ovaries and uterus.”\textsuperscript{109} In order to fulfill the criteria for continuation of one’s lineage, a child must be a genetic product of the husband and wife. Thus, any assisted reproductive techniques involving donated sperm or eggs are not permissible, as these do not enable continuation of the family line.

In Islam, the marriage contract ends with the death of either spouse. As such, the Islamic Organization for Medical Sciences states that assisted reproductive technologies are only permissible “while both partners are still alive.”\textsuperscript{110} The Islamic Medical Association of North America makes a similar statement that assisted reproductive technology may only be used by a couple “during the span of their marriage.”\textsuperscript{111} They further clarify this time frame by stating that “the death of the husband terminates the marriage contract on earth.”\textsuperscript{112}

\textit{Implications for Posthumous Reproduction}

The Islamic Medical Association of North America addresses the issue of posthumous reproduction directly: “we believe in the sanctity of marriage and that the death of the husband terminates the marriage contract on earth, thus frozen

\textsuperscript{108} Fadel, 75
\textsuperscript{109} Athar and Fadel, 7
\textsuperscript{110} Fadel, 75
\textsuperscript{111} Athar and Fadel, 7
\textsuperscript{112} Fadel, 8
sperm from a deceased husband cannot be used to impregnate his widow.”

The reasoning behind this proclamation is based on the idea that childbirth should only occur in the context of marriage, and death terminates a marriage. Dr. Zeba Anwar, an Islamic scholar and physician at Forsyth Medical Center in Winston Salem, North Carolina, explains that “child rearing is a responsibility to be carried out by both the mother and father.” As such, “general consensus among scholars might be that posthumous reproduction interferes with divine decree.” It is important to note, however, that this is a more conservative opinion and, as interpretation of texts varies, so do individual opinions. As described by a Muslim-raised peer of mine who believes in more liberal interpretation,

“Islam is about what is explicit and acknowledging what is unknown and thinking on these thing mindfully. Almost all scholars acknowledge the very limited scientific resource of the holy works. They also know that the will of Allah is that we have these sorts of resources that can be used morally or immorally. The position of a responsible religious person is to think on what is explicit and to glean what should be done when the answers may not be so clear.”

Christian Perspectives

There are multiple denominations within the broad umbrella of Christianity. In this chapter, I will focus primarily on Roman Catholicism and Protestantism. In the

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113 Athar and Fadel, 7
114 e-mail correspondence with Dr. Zeba Anwar
115 e-mail correspondence with Dr. Zeba Anwar
Protestant tradition, I will focus primarily on Pentecostal and Unitarian denominations as they represent both ends of the conservatism-to-liberalism spectrum. It is important to note, however, that there is substantial variation among the different Protestant denominations, and these are just two of many.

*Roman Catholicism*

According to Roman Catholicism, followers are bound by the teachings of the Bible as well as traditions “derived from declarations of church Councils and Popes called dogmas.” These sources are the roots of the Catholic doctrine by which believers are required to live their lives. Similar to Islam, under Catholic law marriage is “the only setting worthy of truly responsible procreation.” This is secondary to the idea that the child is seen as “a living symbol of [the couple's] love, and a permanent sign of their conjugal union.”

With regards to infertility, the Catholic Church permits any assisted technology in as far as it does not take the place of conception through sexual union. The Catholic stance on assisted reproductive technologies is laid out in *Dignitas Personae*, the latest in a series of official Catholic statements on reproductive ethics. In order for treatment to be permissible, it must abide by three fundamental goods: “a) the right to life and to physical integrity of every human being from conception to natural death; b) the unity of marriage, which means reciprocal respect for the right within marriage to become a father or mother only

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116 Schenker, 311
117 Schenker, 311
118 Schenker, 311
together with the other spouse; c) the specifically human values of sexuality which require that the procreation of a human person be brought about as the fruit of the conjugal act specific to the love between spouses.” The third fundamental good limits assisted reproductive technologies to “techniques aimed at removing obstacles to natural fertilization”; thus, artificial insemination and in vitro fertilization are prohibited. This limitation is intended to avoid depriving procreation of “its proper perfection.”

Implications for Posthumous Reproduction

Posthumous reproduction is clearly prohibited in Catholicism due to the absence of sexual union in the conception of such a child. However, strictness of adherence varies. Catholics who observe these reproductive doctrines strictly would not even entertain this request, thus removing themselves from the issue. Other Catholics may in fact pursue such procedures as their desire for a child may outweigh the importance of procreation inside of a marriage.

Protestantism

Followers of Protestantism believe that the only true source of authority in Christianity is the Bible. As such, the rules by which Christians live their lives should come from direct interpretation of the Bible. Protestant thinkers are “encouraged to interpret the scriptures for themselves”; thus, Protestant views on

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119 Congregation of the Doctrine of the Faith, 7
120 Congregation of the Doctrine of the Faith, 7
121 Schenker, 315
122 Schenker, 312
a certain topic can be very different, depending in part on whether they are based on a literal interpretation or very liberal interpretation of the Bible.\textsuperscript{123} One main aspect of Protestant bioethics is the emphasis on the sovereignty of God. With regard to health care, more conservative Protestant beliefs emphasize a “greater meaning or purpose in illness” unknown to us, because God is in control.\textsuperscript{124} Believers are encouraged to seek medical attention when needed, as God works through human skill; however, they are equally cautioned to remember that practitioners are servants of God, and it is God who is in control.\textsuperscript{125} There is also an emphasis on individual freedom of choice for which followers must accept accountability.\textsuperscript{126} This correlates strongly with the idea of individual autonomy in modern bioethics.

In the biblical account of creation at Genesis 1:28, God commands Adam and Eve to “Be fruitful and multiply.” Thus, procreation is an important aspect of Christianity, and medical therapy may be used to treat infertility. The Christian Medical & Dental Association (CMDA) has issued its own statement regarding the permissibility of assisted reproductive technologies in Christianity. Practices that the CMDA finds consistent with “God’s design for reproduction” include artificial insemination, in vitro fertilization, cryopreservation of gametes, adoption, and medicinal intervention to assist in reproduction.\textsuperscript{127} Although this is the official

\begin{footnotes}
\item\textsuperscript{123} Pauls and Hutchinson, 339
\item\textsuperscript{124} Pauls and Hutchinson, 340
\item\textsuperscript{125} Pauls and Hutchinson, 340
\item\textsuperscript{126} Pauls and Hutchinson, 341
\item\textsuperscript{127} CMDA, 1
\end{footnotes}
statement of CMDA, other Protestant associations disagree with the use of in vitro fertilization for reasons similar to those of the Catholic Church.

Although many medical technologies are permissible, more conservative ministers of the Christian faith in the Protestant tradition caution against unlimited use of these technologies. Christina H. M. Powell, a Pentecostal pastor and research scientist, proposes that the use of reproductive technologies abide by three guidelines: respect for the beginning of human life, respect for the marital bond, and respect for the needs of the next generation.\textsuperscript{128} This differs from the three Catholic guidelines in its third guideline, which advocates for the welfare of the future children rather than the necessity of sexual union for procreation. Christianity as a whole advocates for procreation under the protection of the marital bond. As such, the General Council of the Assemblies of God, which has a more restrictive viewpoint than that of CMDA, states that assisted reproductive technologies “must only be used to initiate pregnancy within the context of marriage.”\textsuperscript{129} However, not all denominations condemn procreation out of wedlock. For example Unitarian Universalism, one of the more liberal denominations of Protestantism, permits marriage between homosexuals, who would require conception with the assistance of a third party and thus outside of their marriage in order to procreate.\textsuperscript{130}

\textit{Implications for Posthumous Reproduction}

\textsuperscript{128} Powell, 1
\textsuperscript{129} Zoloth and Henning, 6
\textsuperscript{130} Unitarian Universalist Association
Much like Islam, the death of either spouse terminates the marriage contract in the Protestant tradition. Powell defends this claim, referring to Romans 7:2, which states “For example, when a woman marries, the law binds her to her husband as long as he is alive. But if he dies, the laws of marriage no longer apply to her.” As such, the use of sperm from a deceased husband for procreation would entail procreation out of wedlock and is thus not permissible in more conservative denominations. Furthermore, Powell appeals to respect for the next generation as an important guideline in reproductive medicine. Posthumous reproduction “deprives the child of one of his or her genetic parents” and thus violates the respect for the needs of the next generation.\textsuperscript{131} Again it is important to note that this is a more conservative claim and not backed by all Protestant denominations, especially those with more liberal doctrines. Recognizing that there is a wide variety of beliefs, institutions should seek to understand the reasoning behind requests for posthumous reproduction.

\textbf{Jewish Perspectives}

Jewish biomedical ethics, pioneered by Rabbi Jakobowitz, appeals to the principles found in the sacred texts as well as application of rabbinic law.\textsuperscript{132} The Torah is the single divine text that grounds Jewish law. In addition to the Torah there are several oral sources that Jews look to for guidance, including the Talmud and the Responsa, which discuss “the way religion should be applied in

\begin{footnotesize}
\textsuperscript{131} Zoloth and Henning, 6
\textsuperscript{132} Goldsand, Rosenberg, and Gordon, 219
\end{footnotesize}
the changing world.”\textsuperscript{133} Medicine is acceptable for treatment of human ailments as long as it is in alignment with rabbinic law. This law takes a very liberal approach to science and only “sound evidence of direct harm to persons” and not mere “slippery slope” considerations would entail prohibition of certain procedures or technologies.\textsuperscript{134} This acceptance of “well - intentioned and scientifically based medical intervention – however radical” does not specify who should have the authority to make these medical treatment decisions.\textsuperscript{135}

Like Islam and Protestantism, it is nearly impossible to find consensus on biomedical issues since there are varying traditions of practice as well as “strictness in the interpretation” of texts by Orthodox versus Conservative or Reform Jews.\textsuperscript{136} As there are varying interpretations among the Orthodox, Conservative and Reform traditions, there are also varying opinions within Jewish bioethics. More traditional Jews see these opinions as a subcategory of Jewish law, whereas more secular Jews may use these opinions as a form of guidance.\textsuperscript{137}

With regards to reproduction, Jewish beliefs stem from the divine commandment in Genesis 1:28 mentioned previously. In alignment with this commandment, rabbinic law holds “procreation and heterosexual marital family life as a

\textsuperscript{133} Schenker, 311
\textsuperscript{134} Barilan, 1350-1351
\textsuperscript{135} Barilan 1374
\textsuperscript{136} Goldsand, Rosenberg, and Gordon. 220
\textsuperscript{137} Goldsand, Rosenberg, and Gorden, 220
fundamental value."\textsuperscript{138} Professor Yechiel Michael Barilan, associate professor of medicine at Tel Aviv University, makes the following statement regarding procreation in his book \textit{Jewish Bioethics: Rabbinic Law and Theology in Their Social and Historical Contexts}:

“The halakhic discourse on procreation is three-dimensional. Although the fundamental dimension is the duty that men have from the Torah to procreate, we have seen that it has much less direct bearing on action than do other religious duties. The man needs a consenting partner, and the action required is not fully subjected to will power. The second dimension is the marital duties, which oblige both parties to undergo the ordinary efforts and difficulties associated with sexual life. . . The third dimension is the theological and popular construction of procreation as a “prime duty,” the very first duty. The Talmud explains that the world was created for the sake of procreation. Procreation disseminates the image of God.”\textsuperscript{139}

Clearly, procreation is an important and sacred act in Judaism. Thus, couples should attempt to combat infertility with assisted reproductive technologies. The permissibility of some reproductive technologies is debated under rabbinic law due to worry that “certain aspects of artificial reproduction technologies might erode family values.”\textsuperscript{140} Ordained rabbi and Duquesne University professor of theology Aaron Mackler lists four guidelines that all Jews should abide by with

\textsuperscript{138} Barilan, 5275  
\textsuperscript{139} Barilan, 5318  
\textsuperscript{140} Barilan, 5683
regards to reproductive technologies. These guidelines are similar to the Protestant and Catholic guidelines. According to Mackler, assisted reproduction should abide by respect for persons, procreation, human stewardship, and healing.\textsuperscript{141} Similar to both Christianity and Islam, rabbinic law emphasizes the need for procreation within the setting of marriage and advocates the same for assisted reproductive techniques.

\textit{Implications for Posthumous Reproduction}

Because it aids in fulfilling the first command of God to procreate, it would seem to follow that posthumous reproduction is permissible. This permissibility would rely on alignment of the chosen assisted reproductive technology with rabbinic law. Again, there is certainly a range of attitudes. Some might argue that the importance of procreation outweighs the need for a marital context. Rabbi Andrew Ettin, former professor of English at Wake Forest University, explains that pregnancy out of wedlock “would be regarded in itself as less important than the woman’s adherence to other aspects of domestic and public religious observance.”\textsuperscript{142} Furthermore, “the commandment ‘be fruitful and multiply’ disposes Jewish societies to welcome each birth, even outside of wedlock.”\textsuperscript{143} Rabbi Rebecca Joseph, director of Elon Hillel, The Foundation for Jewish

\textsuperscript{141} Zoloth and Henning, 8
\textsuperscript{142} e-mail correspondence with Rabbi Andrew Ettin
\textsuperscript{143} e-mail correspondence with Rabbi Andrew Ettin
Campus Life, supports this by explaining that although marital procreation is encouraged, “out of wedlock birth is not stigmatized.”

Revised Implications for Postmortem Sperm Procurement

If the purpose of postmortem sperm procurement were for reproduction, this would be prohibited in more conservative Islamic and Christian communities due to its violation of the restriction of procreation to the marital context. However, arguments for its permissibility could be made based on the view by some Muslims that humans are not to claim to know Allah’s will as well as the Christian argument that God has allowed such technologies to arise.

I have been unable to find any explicit statements on postmortem sperm procurement from the Islamic perspective. However, examination of other Islamic doctrines seems to imply that this would be forbidden. For example, funeral rituals begin as quickly as possible after the death of a Muslim. Some localities require burial on the same day as the day of the death. During the funeral rituals, the deceased’s genitals must be covered as it is considered a sin to look at the genitals of the deceased. With this in mind, it would seem sinful to procure sperm from the deceased as manipulation of the penis is necessary by the physician to obtain the sperm.

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144 e-mail correspondence with Rabbi Rebecca Joseph, director of Elon Hillel: The Foundation for Jewish Campus Life
145 Islamic Society of Milwaukee
146 Ahlul Bayt Digital Islamic Library Project
Similarly, statements regarding postmortem retrieval of sperm from Christian perspectives are difficult to find. It can be inferred from Catholic doctrine that use for procreation is strictly prohibited due to the absence of sexual union in the creation of the resulting child. However, once again there is no precedent regarding procurement for therapeutic purposes, and more liberal interpretations of religious texts may be offered. Retrieval for reproduction is also problematic from more conservative Protestant views, as it would lead to procreation outside of wedlock.

Judaism emphasizes respect for the body. In rabbinic law, a dead body should be buried as soon as reasonably possible.\textsuperscript{147} Rabbinic law also forbids any disfigurement of a body or derivation of personal benefit from a corpse, thus it might follow that retrieval of sperm for the spouse or partner’s benefit is forbidden.\textsuperscript{148} However, forensic autopsies in certain cases as well as life-saving organ donation are permissible under rabbinic law since “saving life … may justify the desecration of the dead body.”\textsuperscript{149} Like Islam and Christianity, varying attitudes prevent overarching consensus regarding posthumous reproduction within Judaism.

Religious attitudes towards posthumous reproduction rest heavily on doctrines about marriage. In Islam, Christianity, and Judaism the marriage contract terminates with the death of the spouse and thus procreation with the deceased’s

\textsuperscript{147} Barilan, 4433
\textsuperscript{148} Grazi and Woloweisky, 5
\textsuperscript{149} Barilan, 4456-4457
sperm would entail procreation out of wedlock. Procreation out of wedlock is forbidden in more conservative views by both Christians and Muslims as marriage creates a certain safeguard for the child. Judaism places less emphasis on marriage and more on acceptance of any birth regardless of the context as it fulfills God’s command to “be fruitful and multiply.” In sum, my review of major religious traditions has identified significant diversity in interpretation of reproductive ethics and its application to the issues of posthumous sperm recovery and reproduction.
Chapter 4: Conclusion and Reflection

Religious, ethical, and legal norms vary from culture to culture. It is, therefore, immensely important to consider not only our own or majority values, but also other values that may be involved in cases regarding posthumous reproduction and postmortem sperm retrieval. Every case will be different from others in some respects, and it is important to consider the background of not only the patient and family members but also the staff involved in each case. Physicians, requestors, and other involved parties come from varying backgrounds. I believe we have a responsibility to ascertain and respect the reasonable views of other parties in these situations, and thus it is important to be familiar with the range of views about these practices held by both requesters and staff.

Evidence for Increasing Interest in Posthumous Sperm Recovery

Dr. Cappy Rothman of the California Cryobank graciously allowed me access to certain data involving cases of sperm procurement at that facility from 1980 to September 2014. The full data can be viewed in Appendix Table 1. Since the first procurement in 1980, there have been 147 more for a total of 148 procurements done by this facility between 1980 and September 2014. The vast majority (nearly 88%) of procurements occurred in the last 14 years.\textsuperscript{150} Although this is a limited sample, this facility has done a significant number of these procedures over a long period of time, and its experience may reflect a trend toward increasing numbers of requests for postmortem sperm retrieval and

\textsuperscript{150} See Appendix Table 2
posthumous reproduction. It is important to note that this is data for actual procurements only; many other initial requests were not fulfilled. Reasons for non-procurement varied and were most commonly attributed to change of heart after requestors received the full information regarding the process, cost of such procedures, and time of cardiac death.\(^{151}\) Additionally important to note is the policy by which the California Cryobank guides decisions regarding postmortem sperm retrieval. The Cryobank requires “legal next of kin to authorize any postmortem retrieval requests…if the person was legally single at the time of death … parents can designate the future recipient to receive the semen samples and undergo a future ART procedure.”\(^{152}\)

In addition to this data from the California Cryobank, Kerr et al. completed a study that also reports an increasing incidence of these requests over time. These authors found that among fertility clinics that responded to their survey and had requests for postmortem sperm retrieval between the years 1980 and 1995, over half of all requests were made between 1994 and 1995.\(^{153}\) These reports suggest an increasing trend in requests for posthumous sperm retrieval. As requests increase, institutions should be prepared to consider and respond.

\(^{151}\) Email correspondence with Andrea Stratton, Fertile Future Manager at California Cryobank
\(^{152}\) Postmortem Sperm Retrieval Policy summary via email from Andrea Stratton, Fertile Future Manager at California Cryobank
\(^{153}\) Kerr et al, 2154
Reflection and Tentative Conclusion

My research for this thesis has introduced me to a variety of different ethical, religious, and legal views about posthumous reproduction. These different views occur not only among different countries, but also within the United States. There is currently no federal or state legislation regarding the permissibility of postmortem sperm retrieval, but there have been several state court rulings regarding the permissibility of this practice in certain cases. In the case of Daniel Christy, the judge used her interpretation of the Uniform Anatomical Gift Act to provide justification for the permissibility of postmortem sperm procurement. Using this Act to justify retrieval is not without its limitations. First, authorized retrieval and donation would favor married individuals, because the law recognizes spouses as the authorized decision makers for these anatomical gifts. Additionally, the UAGA grants retrieval rights to those who are not intimate partners of the deceased, including mothers, fathers and siblings, without consideration of the need to involve another party, such as a gestational surrogate, in these instances. The legal permissibility of posthumous sperm retrieval and donation under this interpretation of the UAGA does not address the medical costs associated with procurement, storage, and assisted reproduction. Finally, legal permissibility of posthumous sperm procurement and reproduction does not address the legal status of the posthumously conceived child. Although the desire to have a child may be much more important to the requestor than the legitimacy or inheritance rights of the child, all of these issues are important to
consider as they may have a significant impact on requests and provider responses, as well as institutional policymaking.

Kathryn D. Katz, former professor and Kate Stoneman Chair in Law and Democracy at Albany Law School, surveyed available institutional policies and published reviews in an attempt to analyze different types of policies implemented for postmortem sperm procurement. She found that most policies in her sample fell into one of two broad categories, either restrictive or permissive policies.154 Restrictive policies were more prevalent; Katz describes these policies as requiring that “the decedent must have executed an advance directive that indicates explicitly his or her willingness to have the procedure performed in these specific circumstances.”155 Permissive policies, in contrast, adopted an approach similar to the one defended by Savulescu and adopted in the court’s ruling in the case of Daniel Thomas Christy. These policies allow postmortem sperm retrieval “unless the decedent had explicitly refused to allow sperm retrieval or where there is no reasonable evidence that the deceased person desired children.”156

In a similar but more recent study performed by Bahm et al, 40 institutions were surveyed regarding their current protocols regarding posthumous semen retrieval.157 Of the 40 institutions, they were only able to obtain 9 full protocols,

154 Katz, 301-304
155 Katz, 302
156 Katz, 303
157 Bahm et al, 839
but report results similar to those of Katz.\textsuperscript{158} The majority of the policies were restrictive ("limited" per their terminology) in nature. They found that of the 9 full protocols they reviewed, 6 required explicit written consent.\textsuperscript{159}

As implied by the title, restrictive policies require denial of most requests for this procedure. These policies do not permit sperm recovery based on evidence about the general reproductive wishes of the donor, but rather require that the decedent have 1) previously explicitly considered the event of an untimely death, 2) expressed in writing his consent for posthumous recovery of his sperm, and 3) designated of the person who may use his sperm for reproduction. Because this is a highly unlikely scenario, these policies require denial of nearly all requests. Restrictive policies risk violating patient prior wishes based only on an absence of written consent. There is the potential for violation of patient previous wishes in cases where having children had been discussed prior to death. As mentioned in Chapter 1, in one survey involving a sample of men who had cryogenically preserved their sperm and another of couples currently trying to conceive, over 90\% of both survey populations supported the right of the wife to posthumous conception in the event of the death of the husband.\textsuperscript{160} Another survey involving a random sample found that 70\% of men of reproductive age “would want their spouse to have the option of posthumous gamete retrieval and reproduction” in the event of their death.\textsuperscript{161} Furthermore, restrictive policies completely disregard

\textsuperscript{158} Bahm et al, 839
\textsuperscript{159} Bahm et al, 843.e5
\textsuperscript{160} Tremellen and Savulsecu, 8
\textsuperscript{161} Hans, 12
the interests of other significant stakeholders in these situations. The patient’s spouse or intimate partner may want to conceive, bear, and raise her partner’s biological child as a fulfillment of the life plan they have discussed. Physicians may desire to perform extraction in an attempt to alleviate the suffering of the surviving partner. These stakeholders are denied such requests because the deceased had not provided explicit prospective consent for these procedures.

As is evident in prior chapters, faith and personal ethics contribute heavily to why someone may or may not make this request. Strict Muslims will not consider this a permissible action and thus are not at all likely to request it. Other Muslims may argue that Allah’s will is not to be questioned and if the procedure is possible, it has thus been allowed to be developed for human use and should be permitted. These variations are mirrored in both the different Christian denominations and the three major Jewish faith traditions. People who hold more conservative religious views may not even entertain the idea, whereas members of more liberal denominations or those who do not identify with a particular religions tradition may have strongly held reasons for requesting sperm retrieval. In addition to the background of the requestors and decedents, there are varying faith-based and secular ethical backgrounds of physicians. Some may find postmortem extraction of sperm to be impermissible based on their own religious and ethical beliefs, whereas others may have no moral qualms about honoring these requests.
I recognize that there are significant potential benefits and risks of harm of both restrictive and permissive policies on posthumous sperm retrieval, but my own tentative conclusion is that restrictive policies carry a greater risk of harm with regard to the wishes of the patient and the other parties involved. It is important to acknowledge a key difference between using already banked sperm for posthumous reproduction and procuring sperm from the deceased for posthumous reproduction. Permitting either would require sufficient evidence that the decedent would not explicitly refuse to be a posthumous parent. This evidence could include statements by the family that the decedent did not want children. However, the desire to reproduce is much more evident in the case of previously banked sperm, as it is done primarily for the purpose of future reproduction. Furthermore, there are limitations to assuming that a desire for reproduction in life correlates with a desire for reproduction after death. This is not a direct correlation and is not a compelling argument for permitting posthumous reproduction.

The interests of the requesting party may, however, outweigh the dead in at least some instances of posthumous reproduction. The main risks identified by those advocating a restrictive approach include violation of the interests of the deceased as well as interest of the potential child. I believe that the interests of the deceased are at comparable risk of violation in both restrictive and permissive policies. Permissive approaches may violate a patient’s wish not to reproduce posthumously, whereas restrictive policies may violate a patient’s wish
to reproduce. Additionally, restrictive policies permit retrieval of sperm in cases of explicit written consent, which leads me to believe that the argument for the welfare of the future child is in fact not as pivotal as some claim. The risks involved in pursuing a restrictive approach include not only that of violation of the interests of the deceased but also those of the other major stakeholders in these situations, including the deceased’s partner and family. Additionally, restrictive approaches deny families the secondary therapeutic benefit of obtaining sperm from their loved one as a way to alleviate their grief.

We are all molded by our experiences, cultural and religious upbringing, as well as the influence of our peers. No one person’s experience is identical to another’s, and the diversity of ethical, religious, and legal opinions on this issue is wide. I believe that the most defensible institutional policies should accommodate a range of reasonable requests and should not exclude the majority of requests. Therefore, I conclude that a restrictive policy is not an optimal approach.

I propose that institutional policies should permit posthumous sperm recovery based on careful consideration of the specific circumstances of the situation, including the reasoning of the stakeholders. Such an approach to policy should include several considerations, as follows:

1. Policies should address who may make the request. Many policies require the spouse or legal next of kin in the absence of a spouse. I believe this is too limiting and should be evaluated on a case-by-case basis, as
mandating this would exclude requests from non-married intimate partners of decedents who have no legal next of kin. I believe that a request by a non-married intimate partner deserves consideration and may be more justifiable than that of a legal next of kin who is a sibling requesting sperm retrieval followed by gestational surrogacy.

2. Policies should address the standard of evidence needed to honor such a request. I propose that the burden of proof regarding surrogate consent for sperm retrieval and use in posthumous reproduction should increase as the required procedures and participants move farther away from traditional sexual reproduction. For example, there should be more evidence regarding the desire to reproduce in situations that would involve use of an egg donor and gestational surrogate than in situations where the wife would bear the child, because this involves not only additional assisted reproductive technologies, but also the involvement of a third party. Institutions should be more sympathetic toward requests from wives or intimate partners than from people with more distant relationships. Requests from more distant relatives should require more specific evidence about the deceased's presumed wishes, as intimate partners are more likely than distant family or friends to know the wishes of the deceased.

3. Policies should require disclosure of important information to requesters regarding the costs of the procedure and banking of the sperm, and the
legal issues involving posthumously conceived children among other important considerations.

4. As a condition of sperm retrieval, policies should require that requesters agree to observe a bereavement period before using the recovered sperm for reproduction. This period would enable them to consider carefully all the factors involved in posthumous reproduction before proceeding.

5. Policies should include a clause regarding the rights of staff to conscientiously object to aiding in the procedure, as well as what next steps to take if someone objects. Staff members should express significant religious or moral objections to this procedure in order to exercise these rights of conscientious objection.

6. Policies should specify which of the various procedures the institution will perform, as they vary in invasiveness to the bodily integrity of the deceased.

7. Policies should prohibit sperm retrieval from minors and from newly deceased patients whose cause or time of death would make the retrieval of viable sperm unlikely.

Finally, I recognize that some institutions may logistically be unable to implement such procedures due to staff and resource limitations, and there are other instances in which the institution as a whole conscientiously objects to such a procedure. I believe that these institutions may choose not to offer these
procedures, but they should be aware of other institutions who do allow for this procedure and refer the requesters accordingly.

Based on my review of ethical debates, legal cases, and religious views on this issue, I am persuaded that a more tolerant and less restrictive approach should be taken toward posthumous reproduction as well as postmortem sperm procurement. As discussed above, I believe that this approach avoids significant risks of harm of a restrictive approach. Taking a more permissive approach will enable more justifiable future policies as the number of these requests increases.
References


### Appendix

#### Table 1: Cases of Posthumous Sperm Retrieval by the California Cryobank

<table>
<thead>
<tr>
<th>Year Of Procurement</th>
<th>Relationship Of Next of Kin requestor TO PM DONOR</th>
<th>Cause of Death¹⁶²</th>
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<td>MVA</td>
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<tr>
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<tr>
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¹⁶² MVA = motor vehicle accident, GSW = gunshot wound, NA = not available
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Table 2: Summary of Procurements Performed by California Cryobank, 1980 through September 2014 by 5 year increments

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<th>Percent of Total</th>
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<td>1990-1994</td>
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<td>43</td>
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<td>2005-2009</td>
<td>44</td>
<td>30%</td>
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<tr>
<td>2010-2014</td>
<td>43</td>
<td>29%</td>
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<td>Total</td>
<td>148</td>
<td>100%</td>
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Curriculum Vitae

Catherine Robey
cloobey@gmail.com

EDUCATION

- Wake Forest University, Winston Salem, NC
  o M.A. Candidate in Bioethics, 2013 – present

- The College of William & Mary, Williamsburg, VA
  o Bachelor of Business Administration, May, 2012
  o Concentration: Pre-Medicine
  o Honors in Religious Studies
  o GPA: 3.43/4.0

WORK EXPERIENCE

- Midland’s Orthopedic Practice, Implementations Specialist, Columbia, SC, January 2015 – February 2015
  o In charge of implementing a scribe program, training the physicians on EMR use and training scribes for future positions

- Carolina Neurosurgery and Spine Associates, Chief Scribe, Charlotte, NC, June 2014 – present
  o In charge of recruiting, hiring, and training scribes for the location
  o Responsible for completing scribe reviews, provider reviews, and chart audits
  o Work alongside physicians charting patient histories and physical exams as well as ensuring charts meet billing and coding standards

- Emergency Physicians of Tidewater, Scribe Trainer, Norfolk/Virginia Beach, VA, May 2012- April 2014
  o Assist the physicians with charting patient histories, physical exams, and procedures in Epic
  o Assist procedures when needed
  o Trained future scribes

- DataXstream, Intern, Williamsburg, VA, May 2010- August 2010
  o Responsible for upkeep of social media as well as keeping Salesforce website up to date.
  o Used as a creative resource along with two other interns for the marketing department.
  o Responsible for writing detailed presentations of current marketing success for potential clients.

- Courage Partners LLC, Intern, Norfolk, VA, May-2009- January 2010
Created Excel spreadsheets to manage and prioritize tasks
- Analyzed data in order to categorize various stocks and bonds.
- Uploaded and updated information to company website.

**UBS, Intern, Norfolk, VA, May- August 2008**
- Assisted in bookkeeping tasks including but not limited to transferring residuals and updating client account numbers.
- Created presentation booklets of portfolio performances for clients using Excel and PowerPoint.

**RESEARCH**
- **Kinesiology Research, August 2010- May 2012**
  - Read and reviewed recent publications pertaining to epigenetics and the cardiovascular system.
  - Prepared presentations for assigned papers and presented article findings to professors and peers.
- **Children’s Hospital of the King’s Daughters, Norfolk, VA, Fall 2011**
  - Conducted research and co-wrote an article on the evolution of the pyeloplasty with Dr. Jyoti Upadhyay
  - Published by CHKD Surgical Group Journal Fall 2011
- **Faculty Research – Religious Studies, Williamsburg, VA, May 2011 – August 2011**
  - Investigated the evolution of the definition of madness and the societal reactions to its existence.
- **Faculty Research – Organizational Behavior, Williamsburg, VA, January 2010 – Mary 2010**
  - Organized and conducted focus groups in order to observe the effects of physical attractiveness on team dynamics.
- **Riverside Geriatrics, Williamsburg, VA, August 2009- December 2009**
  - Conducted surveys and interviews of nurses, physicians, and physical therapists in order to understand the motivations behind career paths.
  - Co-created campaign for Riverside Geriatrics in order to recruit employees in both the medical and service fields.

**ACTIVITIES AND VOLUNTEERISM**
- **Dog Fostering, Winston Salem, NC, February 2014- Present**
  - Aid in the rehabilitation of abused and neglected dogs as well as the reintroduction to other dogs and people
- **EVMS Effectiveness of Community Outreach, Norfolk, VA, May 2012-April 2013**
Assist with assessing the effectiveness of high school magnet programs offered through EVMS

- Physician Shadowing – Dr. Lopa Hartke, Dr. Jonathan Fleenor, Dr. Bertrand Ross, Dr. Elliot Tucker, Norfolk, VA, December 2012
  - Observed cardiac stress tests cardiac echoes, physical exams

- William and Mary Club Volleyball, Social Chair, Williamsburg, VA, December 2010- May 2012
  - Collaborate with other teams to organize social events
  - Organize weekly team bonding activities

- Surgeon Shadowing – Dr. Jyoti Upadhyay, Norfolk, VA, December 2010-January 2011
  - Observed pediatric urologic surgery at the Children’s Hospital of the King’s Daughters.
  - Observed patient visits and procedures.
  - Responsible for researching the evolution of the pyeloplasty for surgical group publication.

- Surgeon Shadowing – Dr. Edwin Robey, Norfolk, VA, October 2010
  - Conducted hospital rounds with an on-call urologic surgeon.

- Student Marketing Association, Director of Alumni Relations and Social Affairs, Williamsburg, VA, August 2009-December 2010
  - Assisted in organizing marketing symposium for the Mason School of Business.
  - Network with Alumni and coordinate social events. Contact speakers to attend meetings and draft projects for the association to work on throughout the semester.

- College Partnership for Kids, Williamsburg, VA, August 2009- December 2009
  - Traveled to participating schools and aided in math tutoring for fifth graders.

- Norfolk Emergency Shelter Team, Norfolk, VA, December 2000-Present
  - Assist with organizing a place for the homeless to sleep and eat during the holiday season.

- Best Buddies of Virginia Tech, Blacksburg, VA, January 2008-May 2009
  - Assisted the disabled in the New River Valley community and helped build social skills.