

# ***The Uneasy Intersection of Law and Medicine***

Rachel Barnes, Alex Bennion, Cynthia Chen,  
Stanford Escalante, Yen Nguyen, Cedric Shaskey,  
Stevenson Smith, Joshua Southwick, Kortnie Walker,  
Thomas Wallace



A Think Tank on the Tension between Law and Medicine  
presented by the University of Utah Honors College

Judith Atherton JD  
Margaret Battin PhD  
Kirtly Jones MD





*To our friends, families, professors, and University of Utah Honors College for  
their continuous support and guidance.*

*Thank you for allowing us to think big and achieve more.*



# The Honors Think Tanks University of Utah

**H**onors College Think Tanks are year-long, for-credit courses that draw students from all disciplines to collaborate with each other, faculty, and community members as they design original solutions to pertinent social issues. Think Tank topics vary each year, but fall under four focus areas of Health & Society, Energy & Environment, Social Justice, and Global Networks. Under the guidance of distinguished faculty, students analyze their topic through in-depth classroom and field research such as lectures, panels, one-on-one interviews, readings and off-campus trips. Students are then asked to develop innovative, project-based solutions to the problems they have uncovered.

---



# Contents

The Uneasy Intersection between Law and Medicine ..... 1

Faculty Advisors ..... 2

Student Participants ..... 3

Guest Speakers ..... 5

## Topic Exploration

The Beginning of Life ..... 8

Mental Health and the Law ..... 17

Drugs and the Law ..... 23

## Think Tank Project

Reduce the Abuse: An Initiative for Post-Prescription Management ..... 30

*The Curriculum Group* ..... 32

*The Legislative Group* ..... 34

*The Technology Group* ..... 37

Hindsight: Personal Reflections ..... 38



---

# The Uneasy Intersection of Law and Medicine

---

This Think Tank explores the uneasy relationship that often arises between law and medicine, also as surveyed through the eyes of philosophy. This topic includes issues in which the law has dictated medical practice, issues where medical practices appear to run outside the law, or where there is no law...yet. In particular, the broad topic includes issues where the ethics of the situation appear to dictate yet another response beside those envisioned in either medicine or the law. Indeed, as Andrew Jay McClurg at the University of Memphis puts it, doctors and lawyers often resemble a “fight club,” with clients and patients in between.

It is this uneasy relationship that the Think Tank will address. Students will receive some training in legal analysis, exposure to medical differential diagnosis, and some introduction to philosophic analysis; they will be expected to employ all these forms of thinking in the development of the Think Tank Projects. The long term intention of the Think Tank is to make it possible for participants to understand the thinking, values, and forms of reasoning of both law and medicine, before they specialize in either, or become informed citizens and consumers of both.

---





## Faculty Advisors

### Kirtly Jones MD

I am a Professor and Vice Chair for Educational Affairs at the Department of Obstetrics and Gynecology where I have had an academic appointment for the past 30 years. My undergraduate degree was in Biology from the University of Colorado, where I also attended Medical School. My residency in obstetrics and gynecology and fellowship in reproductive endocrinology were completed at Harvard Medical School.

My clinical and research interests include contraception and family planning, advanced reproductive technology, and menopause. I have taught Ethics in Reproductive Medicine with Professor Battin, as well as teaching reproductive medicine to medical students, residents and physicians. The University of Utah has been my academic home for my entire "grown up" academic life and I have been honored to have received the Linda K Amos Award for Distinguished Service to Women, the Jarcho Distinguished Teaching Award and the Hatch Prize in Teaching by the University of Utah. I am a past President of the Academic Senate at the University of Utah, which was a wonderful opportunity to see our city-on-the-hill work from the inside.

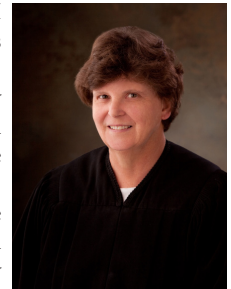
I share my life and interests in the environment and the health of the planet with my husband and partner of 40 years, Chris Jones MD, PhD, who also does research in oh-wow biology.



### Judith Atherton JD

After graduating from Wellesley College with a B.A. in Art History, I moved to Salt Lake City, eventually earning a M.A. in Early American History and a J.D. from the University of Utah. Since 1995 I have served as a judge in the Third Judicial District Court of Utah, serving Salt Lake, Tooele and Summit Counties. Prior to my appointment to the bench I practiced oil and gas law, domestic relations as a staff attorney for the Legal Aid Society of Salt Lake, criminal appeals as an Assistant Attorney General for the State of Utah and heard domestic relations and criminal matters as a Court Commissioner. During my tenure as a judge I have served as co-chair of the Standing Committee on Children and Family Law, a member of Board of District Court Judges, the Commission on Criminal and Juvenile Justice, the Utah Judicial Council and numerous other commissions and committees. It has been an honor to have been named the Christine M. Durham Woman Lawyer of the Year and Utah State Bar Judge of the Year.

I am assigned to the criminal division of the Third District Court, hearing primarily felony criminal matters but have supervised the Mental Health Court in our district since 2004. That calendar addresses the needs of severely mentally ill offenders who have found themselves in the criminal justice system. Of the many types of cases I have heard, I find my work in Mental Health Court to be the most gratifying and hope that this multi-disciplinary effort has offered real help to those afflicted and provided a greater measure of safety and understanding in the community.



### Margaret Battin PhD

If you want to address me formally, it's Margaret Pabst Battin, M.F.A., PhD., Distinguished Professor of Philosophy and Adjunct Professor of Internal Medicine, Division of Medical Ethics and Humanities, at the University of Utah, or, for short, Peggy. You could make it more ostentatious by pointing out that I've authored, co-authored, edited, or co-edited at least twenty books (I think I've lost count), including works on philosophical issues in suicide, case-puzzles in aesthetics, ethical issues in organized religion, and various topics in bioethics. You could embellish it by observing that I've published two collections of essays on end-of-life issues, *The Least Worst Death* and *Ending Life*, and have been the lead for two multi-authored projects, *Drugs and Justice* and *The Patient as Victim and Vector: Ethics and Infectious Disease*. In 1997, I won the University of Utah's Distinguished Research award, and in 2000, received the Rosenblatt Prize, the University's most prestigious award. This is all very flattering, but what's important to me is not just what I've done in the past, but what I'm working on now: a comprehensive historical sourcebook on ethical issues in suicide, to be published by Oxford, a multi-co-authored volume of case-puzzles about issues in disability (also Oxford), and a book on large-scale reproductive problems of the globe, including population growth and decline, teen pregnancy, abortion, and male roles in contraception, along with new ideas like urban design or thought-experiments or even how to redesign the ICU. Of course, there's hardly ever enough time, but big new make-the-world-a-better-place ideas seem to me what it's all about.



# Student Participants



Cedric Shaskey

I chose physics as my major because I think that understanding the smallest building blocks of our universe helps us to understand it on the biggest level. Although I am a science major, I have many diverse interests, including, but not limited to, philosophy, business, politics, debate, socializing, hiking, skiing, fishing, camping, sports and all other manner of outdoor activities. I am uncertain as to my career path – I am considering academia, law or medical school. I enjoy learning about all sorts of different things; I enjoy learning in general. My goal in this Think Tank is to dissect the fields of law and medicine to better plan for my own path while applying the same knowledge to alleviate the tension between the two fields.

Sophomore, Physics

Cynthia Chen

My interest in this think tank stems not only from a general interest in law and medicine, but also from a greater interest in figuring out how different professions interact in society. The phenomenon that is the uneasy intersection between law and medicine is interesting to me because it is an example of how antagonistic groups coexist and interact. A very important lesson I have learned is that tension between fields is not always a bad thing. Tension can often be used as a catalyst for productivity and change. In the future I hope to pursue a career in arts administration. In my work I will remember not to think of tension between different professions as an inhibitor, but as an opportunity to work collaboratively and find creative solutions.



Sophomore, Music

Rachel Barnes



I am interested in health policy, and issues in healthcare access for marginalized and vulnerable populations. Through the Hinckley Institute of Politics, I designed a Medicare reform policy proposal and was chosen as a national finalist for the Truman Scholarship. I have worked on community health and sanitation programs in Phnom Penh, Cambodia, and served as the Director of Community Service at the University of Utah. I joined the Think Tank on the Uneasy Intersection of Law and Medicine for the spring semester, after participating in “The Patient Experience Project” during the fall semester; I worked to increase the number of advance directives on patients’ electronic medical records. Next fall, I will be attending the University of Michigan to pursue a master’s degree in Health Management and Policy.

Senior, Political Science

Kortnie Walker

I have an interest in how the law and the medical field interact with and shape one another, but on a more intimate level I am interested in the human experience concerning this intersection—how do the laws governing the medical field affect the average American? I originally tried approaching this Think Tank as a detached observer, but quickly found myself deeply invested in the subjects we discussed because the surrounding ethical issues were so opaque. These moral quandaries challenged our class as a whole and I realized that perhaps there isn’t always an answer to every question. Regardless, we still need to make hard decisions, and I hope to apply this same fortitude to every challenge in my life.



Junior, Biochemistry





Senior, Finance

### Stanford Escalante

I have worked on the management and operational side of the healthcare industry for five years. My exposure to the industry shed light on many opportunities for improvement that exist within the U.S. healthcare system, and this think tank was a great opportunity for me to explore them further. Exploring the intersections of healthcare and law sounded fascinating, but what really drew me in was my desire to explore the financial outcomes of these tensions and their effects on society. I looked forward for the opportunity to help make health care a more effective and sustainable system.

### Stevenson Smith

I was born and raised in Orem, Utah to remarkable parents, and moved to Salt Lake after graduating from High School. I was drawn to this specific think tank because of my deep interest for both philosophy and the law. I could not have asked for a better experience.



Junior, Philosophy

### Thomas Wallace



Sophomore,  
Biomedical Engineering

I have been interested in medicine since an early age due to the chronic health conditions faced by my family members. This interest quickly grew into a desire the not only to go into medicine, but to seek to improve the existing tools for better patient care. My dream is to go to Harvard Medical School and from there go on to develop new medical devices such as artificial hearts and dialysis filters. I also want to work within health care administration to better coordinate the jobs of health care workers through use of better software and hardware that will allow for better interface between all levels of healthcare.

### Alex Bennion

I am from Salt Lake City, Utah. For three years prior to my studies in Salt Lake City, I studied at Seattle University, including a semester in Copenhagen, Denmark. During my undergraduate career, I have pursued studies related to mental health, physical health and philosophy. While attending the University of Utah, I worked in a research laboratory at the Moran Eye Center and volunteered throughout the community, including the Fourth Street Clinic and Wasatch Physical Therapy. After graduating, I intend on pursuing a degree in Medicine or Osteopathy. In the future, I envision myself balancing interests in holistic medical care and outdoor recreation.



Senior, Psychology

### Yen Nguyen



Sophomore, Psychology

I became interested in this Think Tank because of the draw towards resolving a problem between law and medicine in our community. As I am planning on becoming a physician in the future, it was intriguing to confront issues between the two fields, head-on in a neutral environment. As we developed the project, it became apparent that law and medicine are not two dichotomies; the lines between the two fields become blurred when dealing with healthcare issues. This think tank not only helps me to understand the different professional perspectives of law, medicine, and ethics, but to also look at problems through the view of the consumer and private citizen.

# Guest Speakers



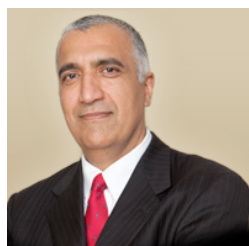
**Jeanette Chin MD** is a Visiting Instructor in the Department of Obstetrics and Gynecology at the University of Utah Health Sciences Center and a Maternal-Fetal Medicine fellow at UUHSC. She received her M.D. from Vanderbilt University and completed her residency training in obstetrics and gynecology at Duke University. Her research interests include the association of obesity and adipokines with obstetric complications, in particular dysfunctional labor.

**Nancy Cohn PhD** is a forensic psychologist who evaluates adolescents and adults for both the State and Federal courts. She has been licensed in Utah since 1984, and worked as a clinical psychologist in the public mental health system for seven years prior to completing a post-doctoral fellowship at the University of Southern California Institute of Psychiatry, Law and Behavioral Science. She has had advanced training in a number of areas involving the nexus between law and mental health, including issues related to civil commitment, civil and criminal competencies, risk assessment, custody and visitation, personal injury, and disability determination.



**Chief Justice Christine Durham** has been on the Utah Supreme Court since 1982, and served as Chief Justice and Chair of the Utah Judicial Council from 2002 to 2012. She received her J.D. from Duke University, where she is an emeritus member of the Board of Trustees. She has been active in judicial education and helped create and lead the Utah Coalition for Civic Character and Service Education. She was an adjunct professor for many years at the University of Utah College of Law, teaching state constitutional law.

**Paul Gahlinger MD, PhD** left school at age 14 to become a farm worker, and later worked underground at Giant Mine gold mine near Yellowknife in the Canadian Northwest Territories and was a logger for MacMillan Bloedel Limited on Vancouver Island in British Columbia. At age 20, he gained entry to college despite lacking a high school education or diploma. He eventually achieved a B.A. in Philosophy, M.A. and Ph.D. in Anthropology, M.P.H. in Epidemiology, and M.D. degrees. He studied at numerous universities, with degrees from the University of California, Berkeley and University of California, Davis.



**Sim Gill JD** was elected as Salt Lake County District Attorney in November 2010. He received his J. D. degree from Northwestern School of Law at Lewis and Clark College. As a veteran prosecutor, Sim has been a champion on issues of therapeutic justice, criminal prosecution and alternatives to prosecution. Sim has collaborated on the creation and implementation of various therapeutic justice programs including Mental Health Court, Salt Lake City Domestic Violence Court, Misdemeanor Drug Court and the Salt Lake Area Family Justice Center and the newly implemented Early Case Resolution program.





**Richard Ingebretsen MD, PhD** graduated from the University of Utah with a masters in physics and a PhD in Physics Education. He received an MD degree from the University of Utah School of Medicine in 1993. He is now a clinical instructor of medicine at the University of Utah School of Medicine and a professor in the Department of Physics. He is an attending emergency room physician and practices internal medicine. He is the program director of wilderness program at the University of Utah School of Medicine and is the medical director of Salt Lake County Sheriff's Search and Rescue.

**Brent Kious MD, PhD** graduated from the University of California, Los Angeles David Geffen School of Medicine. He is currently a third year resident in the University of Utah Department of Psychiatry. A key speaker in the Think Tank's Drugs and the Law unit, he spoke to the Think Tank about performance-enhancing drugs and its current implications in today's society.



**Judge Randall N. Skanchy** was appointed to the Third District Court in January 2001 by Gov. Michael O. Leavitt. He received a law degree from Brigham Young University. He has 21 years of trial experience as counsel in civil and environmental matters in state and federal courts. Judge Skanchy is a member of the Utah Judicial Council's Ethics Advisory Committee, the Board of District Court Judges, and chairs the court's Community Outreach Subcommittee.

**Katherine Ward DNP** received her bachelor's, master's, and doctoral degrees in nursing from the University of Utah. Currently an associate clinical professor in the University of Utah College of Nursing division of Health Systems and Community Based Care, she has established herself as an expert in family planning, abnormal pap management, and chronic pelvic pain. She also currently serves as Executive Director and the MS and DNP programs and maintains a clinical practice with BirthCare HealthCare as a Women's Health Nurse Practitioner.



*We would also like to thank all the guest speakers whose biographies and photos were not available:*

*Heidi Buchi JD  
Heather Brereton JD  
Allan Rice PhD  
Bettina Zaharias*

*Useonlyasdirected.org represented by Liz, Anna and Steve*



# The Beginning of Life



Ed Uthman. "9-week human embryo." photo. Flickr. Published 2000. Accessed April 17, 2013. <<http://www.flickr.com/photos/euthman/548063929/sizes/o/in/photostream/>>



# Keeping Up with Genetics

*Cedric Shaskey*

In the past few decades, advances in genetics and genomic sequencing have grown exponentially. Between 2001 and the present, the cost of sequencing an entire human genome has decreased ten thousand fold<sup>1</sup>. With the ability to test for thousands of debilitating disorders in unborn children and with the cost of such tests withering<sup>2</sup>, large amounts of genetic information will soon be easily available. To combat the rising problem of genetic lawsuits<sup>3</sup>, genetic information should be better protected, genetic counseling should be greatly expanded and prenatal care should be standardized and regulated.

One major legal claim is that the provider failed to perform the necessary tests. If the conditions under which each test is performed are further standardized then it will become clear cut when to perform, or at least recommend, certain tests.

Another major legal claim is the failure to inform the patient. There are essentially two parts to this claim – the health care provider failed to mention the results or the patient failed to fully understand the results due to improper communication. Failure to mention the results on the part of the health care provider is negligence and should be eliminated; this can be taken care of by standardization. The second part of the claim, the patient failed to fully understand the results, is harder to address because it is difficult to quantify understanding. The results of certain tests can be formidable to communicate to the general populace. An organized system of communication that can help translate the information needs to be instituted. Health care providers have installed genetic counselors to inform patients on the complex material, however, a uniform system of genetic counseling is absent. When

there is a standard and all health care providers accept and abide by the standard it simplifies negligence claims. If health care providers abide by a uniform system that is honorable and reasonable patients will accept their risk much more easily. On top of this, improved tests, such as DANSR (Digital Analysis of Selected Regions), have made outcomes more conclusive.

In short, because the law is very systematic the medical practice of prenatal screening needs to homogenize. Standards for performing tests, revealing test results, and translating results into language that is understandable by the general populace need to be instituted. The courts of law are already being mandated to regulate genetic testing, however, they are in conflict with each other – nine states prohibit wrongful birth while twenty-five acknowledge it as a legitimate cause of action. This leaves standardization and enforcement to those within the field of genetics; this is where the responsibility should lie. Education is imperative, but it is impossible to educate the populace about a field that can vary from state to state or even from hospital to hospital. Standardization is essential. The field of genetics is evolving rapidly; mankind is going to have the ability to do something he never thought possible: engineer himself. If there were to be an authoritative body on the clinical practice of genetics they would be best equipped to handle all the moral, ethical and practical challenges that will go along with genetic modification. It would not be wise to confront the issues associated with genetic modification without a guide.

<sup>1</sup> National Human Genome Research Institute, “DNA Sequencing Costs” (2013), at <http://www.genome.gov/sequencingcosts/> (Accessed April 16, 2013)

<sup>2</sup> NBC News, “New testing could help spot genetic disorders in a fetus” (2012), at <http://www.nbcnews.com/id/47710985/ns/health-health-care/t/new-testing-could-help-spot-genetic-disorders-fetus/> (Accessed April 16, 2013)

<sup>3</sup> National Human Genome Research Institute, “Cases of Genetic Discrimination” (2012), at <http://www.genome.gov/12513976> (Accessed April 16, 2013)

# A Struggle for a New Normal:

## *The Morality of Surrogacy and Its Effect on Law, Medicine, and the People*

Cynthia Chen

Law and medicine have had a long standing history of conflict. One reason for this tension is that law has the power to dictate what is done in medicine. Laws are supposed to be in place to protect the rights of people, but what happens when laws protecting the rights of certain groups prohibit the rights of another? In debates about rights, medicine often finds itself caught in the middle. In the case of same sex relationships, the uneasy intersection of law and medicine is brought to center stage. The tension is especially apparent in one of the United States' most culturally conservative states, Utah. Laws

concerning same sex couples seeking surrogacy in Utah are clear. According to Utah Code and the Utah Uniform Parentage Act, "The intended parents shall be married, and both spouses must be parties to the gestational agreement" (Utah Code Ann. § 78B 15-801). Utah Code also states that "it is the policy of this state to recognize as marriage only the legal union of a man and a woman" (Utah Code Ann. § 30 1-4.1). Therefore, according to these two sections of Utah law, it is not possible for same sex couples or single adults to use assisted reproduction to conceive a child.

The reason to discuss same sex relationships in surrogacy law is to highlight how differing public opinions can affect the uneasy intersection between law and medicine. Law and medicine exist to serve the people. When there is a moral issue that the general public cannot agree upon, the balance between law and medicine that had been achieved through structured legislation becomes unhinged. As long as the general public is conflicted over a certain moral issue, there will continue to be struggle between law

*Laws are supposed to be in place to protect the rights of people, but what happens when laws protecting the rights of certain groups prohibit the rights of another?*

and medicine. However, this does not mean that the two professions will remain in a state of static dispute. This just means that as moral views and laws change, the relationship between law and medicine will continue to develop. The discussion on surrogacy and same sex couples exemplifies how the general public can play an important role in the relationship between the uneasy intersection between law and medicine. One idea is that the way to improve relations between law and medicine begins with uniting the people.



---

<sup>1</sup> Utah Code Ann. § 78B 15-801

<sup>2</sup> Utah Code Ann. § 30 1-4.1

# When Does Life Begin?

Kortnie Walker

# The Incompatibility of Unconditional Love and Parental Choice

Stevenson Smith

Any effort defining the beginning of human life is a particularly sensitive endeavor, and intricate at best. However, societies must find a suitable definition. They must draw a line because of the many medical and legal issues associated with human—particularly early human—life. However, once the question of deciding when to assign “personhood” has been addressed, the legal questions that follow become much easier to answer.

More important than debating the beginning of life is protecting those affected by this convoluted area. Perhaps the best way to offer mediation is educating the public about differing viewpoints surrounding abortion and the struggle we all face when justifying our own beliefs. Until we come to a consensus regarding the beginning of life, the United States must adhere to the legal ruling handed down in *Roe vs. Wade*. Perhaps this case will become akin to *Plessy vs. Ferguson* and the course of abortion and its legal standing in this country will change dramatically.



The notion that parents (especially mothers) have the right to choose whether or not they want a child with a genetic disorder is shockingly ubiquitous in its acceptance and almost never morally questioned. When it is questioned, it is almost always done under the context of abortion. Sometimes it is criticized in situations of selective in vitro fertilization, and it is rarely even touched in circumstances where parents opt for adoption because the risk of having a disordered child would be too high with their own genetics. However, I do not think this kind of parental choice is consistent with the demands of unconditional love—something a mother and father should strive to offer their child.

Unconditional love—a love without conditions and a love immune to its beloved’s characteristics or actions—is undermined when parents begin to think they can choose what kind of child they want to have. If a mother is adamantly opposed to having a homosexual child, she is placing a condition on her love for her children. A father falls victim to this same fault in love if he must have a son instead of a daughter. Choice and unconditional love are logically contradictory. Choice always stems from conditions—of which, unconditional love must necessarily be blind. Choice makes love earned; therefore, it can be taken away. If we want a pure and unconditional foundation in the love expressed from parent to child—and if we want the grounding happiness it creates—we must make the origin of a parent’s love for his or her child completely void of condition.

*Perhaps the best way to offer mediation is educating the public about differing viewpoints surrounding abortion and the struggle we all face when justifying our own beliefs.*

# End the Strife at the End of Life:

## *Advanced Directives and their Place in Modern Medicine*

Rachel Barnes

In 2010, Utah's Intermountain Healthcare facilities set a goal to increase the number of advance directives on patients' electronic medical records. Prior to this, only 11% of discharged patients at Intermountain facilities had an advance directive on their electronic medical record, yet a majority of patients over age 65 had an advance directive. With the rise of the information age, electronic medical records will become increasingly important and will have the potential to change the ways in which medicine is practiced.

One of the main reasons difficulties for healthcare professionals as they look to increase the number of advance directives that are completed is that there are a variety of different advance directive forms that can be filled out. Additionally, the laws for advance directives are significantly different in each state. This causes an unnecessary amount of confusion as healthcare providers work with patients to understand their options for advance directives, and can ultimately cause patients to give up before they have successfully completed the required paperwork.

*It is imperative that we find a way to effectively reach across language and cultural barriers, and that we dispel the myths of invincibility that cloud the judgment of young people.*

Two populations that are significantly overlooked in the discussion of advance directives are young adults and immigrants to the United States. Specifically, young adults between the ages of 18 and 25 are neglected in the discussion of advance directives, as are those whose native language is not English. With the system that is currently in place, these two groups are overlooked and there are no programs designed to reach out to these underserved populations.

For children under age 18, their parent automatically becomes their healthcare agent in case of

emergency. Once a patient turns 18, however, they are able to choose their own healthcare agent, as well as dictate their own decisions regarding specific procedures and situations. For many young adults, their parents would still be their preferred choice for a healthcare agent, but there are many young adults who would choose otherwise. This is especially important for members of the LGBTQ community, as without an advance directive dictating their partner as their healthcare agent, their partner would be completely isolated from their medical care and the decisions involved in an emergency situation.

In situations where the patient's first language is not English, the resources regarding end of life care are insufficient. For example, in the state of Utah, the advance directive materials are only available in English and Spanish. There are occasionally translators on site to help with these conversations, but the language options are minimal and the written materials are not available. While the language barriers not sufficiently addressed, the cultural barriers are not even acknowledged. End of life care is handled very different-

ly across cultures, and the system that is currently in place does not allow for patients to adequately discuss

or make decisions regarding end of life care while still respecting and engaging with their cultural traditions.

It is imperative that we find a way to effectively reach across language and cultural barriers, and that we dispel the myths of invincibility that cloud the judgment of young people. Advance directives are a clear way to address many of the legal, medical, and personal issues that can arise during a patient's end of life care.



# Religion vs Reproductive Health

*Stanford Escalante*

There are currently 56 Catholic health systems and smaller systems in the United States.

Together these systems account for more than 20% percent of United States admissions<sup>1</sup>. The choices made by the Catholic Church affect a large number of people, Catholic or not, in the communities that these systems serve.

Catholic health care systems are governed by the Catholic Church and are required to practice in accordance with the churches values. Strict bans and rules, put forth by the church, related to reproductive health have created concerns in the United States.



Gandy, Imani. The Bishops' Politics: Why are Women's Health and Lives Subject to The Catholic Lobby?. 2012. Photograph. RH Reality CheckWeb. 24 Apr 2013. <http://rhrealitycheck.org/article/2012/06/18/politics-catholicism-womens-health-and-hospital-mergers-3/>.

Employer-based insurance coverage has been impacted by the church's decision to not include contraception as part of the preventative care portion of

health insurance provided to their employees. The Church denied allowing this despite President Obamas attempt at a compromise by having insurance companies pay for the reproductive care portion instead of the employer, and the fact that two-thirds of Catholic women said they wanted contraceptive to be included on their insurance plans<sup>2</sup>.

Directive 36 is the only compromise the church has made thus far, and it states that a Catholic health care system can perform emergency contraception on a rape victim If after adequate testing it is determined that the woman is not pregnant<sup>3</sup>.

More than two-thirds of Catholic woman want to have reproductive health services covered through their employer-based health insurance and 98% of Catholic women use or have use contraception, their voices are not being heard<sup>4</sup>.

Catholic health systems are private businesses and have the freedom to exercise their beliefs. However, they do participate in federally funded programs, like Medicare, and they do impact a large portion of the communities they serve that are not Catholic. It would be appropriate for the government to leverage the revenue the hospitals receive, from federal programs, and advocate for

the freedom of choice and for the reproductive health rights of the women Catholic health systems serve.

<sup>1</sup> "Catholic Health Care." Catholic Health Association of the United States. N.p., Jan 2010. Web. 11 Sep 2012. <CHAUSA>.

<sup>2</sup> Alonso-Zaldivar, Ricardo. "Catholic hospitals reject birth control compromise." NBC NEWS. Associated Press, 15 June 2012. Web. 11 Sep 2012.

<sup>3</sup> "Ethical and Religious Directives for Catholic Health Care Services Fifth Edition." USCCB. United States Conference of Catholic Bishops, 17 Nov 2009. Web. 11 Sep 2012. <<http://www.usccb.org/issues-and-action/human-life-and-dignity/health-care/upload/Ethical-Religious-Directives-Catholic-Health-Care-Services-fifth-edition-2009.pdf>>.

<sup>4</sup> Dreweke, Joerg. "Contraceptive use is the norm among religious women." Guttmacher Institute. Guttmacher Institute, 13 Apr 2011. Web. 12 Sep 2012. <<http://www.guttmacher.org/media/nr/2011/04/13/index.html>>.

# One-Child Policy

*Thomas Wallace*

The intersection of law and medicine is by its very nature a balance of individual rights and the public good. In China's One Child Policy, the state claims that the public good trumps the most fundamental rights of individuals: life and the ability to procreate. An examination of this policy raises fundamental questions on the power of government and human rights. It also serves as an example of how government laws and policies often lead to unintended consequences that can actually undermine the very public good they are meant to promote.

The Chinese government claims that their family planning has liberated the female productive forces and helped improve the status of women. Dissidents have found support from both feminists and an-

ti-abortion supporters by claiming forced abortion is not a choice. Many opponents believe the policy simply results end in dehumanization.

China's culture has long stressed community over individuality. It forces us to question the limits of government power and the origin of human rights. Do these rights come only from the government, or are they more basic and need to be respected by the government? It forces us to question the wisdom of all governmental attempts at central planning. In conclusion, we as individuals must carefully weigh the wisdom of all laws that seek to promote the public good at the expense of the individual.





# Embryonic Stem Cell Controversies

Alex Bennion

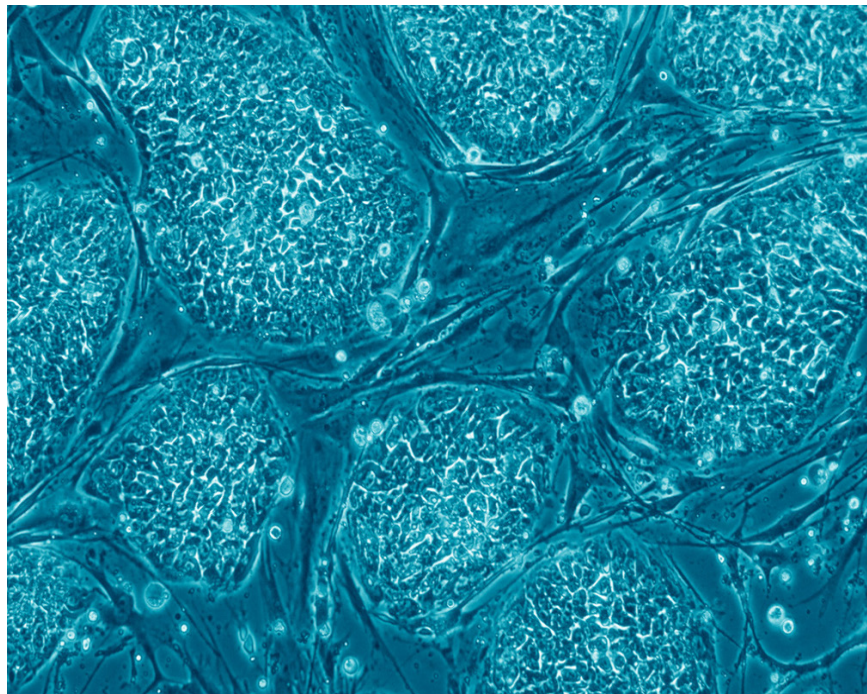
The progression of research addressing embryonic stem cells (ESCs) demonstrates a current unresolved tension between legal interpretation (law), public policy and cutting edge medical research (medicine). When the technology to collect ESCs became available in 1998, researchers quickly identified their unprecedented potential in regenerative medicine. ESCs can be used in the treatment of many diseases (cancer, cardiovascular disease, diabetes, etc.) and can even rebuild human organs. However, one salient issue surrounds ESC research: what rights and protections should be granted to ESCs.

a human life. However, if one's definition of when human life begins does not rely on conception, then the scientific value of ESC research clearly outweighs the potential harm to society.

Due to the differences in beliefs about when human life begins, this promising field of medicine has been reduced to limited studies that are heavily reliant on private sources of funding. Going forward, some resolution in the philosophical basis of this impasse will be necessary to fully unlock the potential of ESCs.

*... this promising field of medicine has been reduced to limited studies that are heavily reliant on private sources of funding.*

ESC research to this point has been hindered by the philosophical and legal interpretation of the rights and protections that should or should not be granted to ESCs and the policies, which define the beginning of life. Individuals who claim that human life begins at conception frequently question the morality of ESC research. This is because they believe that human embryos should be granted the same rights and protections as fully developed persons. Since the current procedure for collecting ESCs results in the destruction of the embryo, opponents can make a claim that collecting the ESCs robs society of



Follow the Money – The Politics of Embryonic Stem Cell Research. Russo E, PLoS Biology

# What's your IQ?

## *Developmental Disability and the Right to Procreate*

Yen Nguyen

**L** in 700 babies are born each year in the United States with Down Syndrome<sup>1</sup>. As these children grow into adulthood, questions arise over their ability to procreate and become parents. Law, medicine, and family positions struggle over deciding the best course of action for those with developmental disabilities wishing for parenthood. Is it an infringement of personal rights by any of the three previously mentioned parties to prevent a person with impaired mental cognition from procreating by means of sterilization or discrimination?

Current Utah legislation states that physicians may only sterilize a person if “the physician, through careful examination and counseling, ensures that the person is capable of giving informed consent and that

no undue influence or coercion to consent has been placed on that person” and a petition has been filed and an order of authorization is given by the court of jurisdiction<sup>2,4</sup>. However, for medical professionals, they must determine with the caregivers of those with developmental disabilities how to achieve the best quality of life for both patient and family. This is when medical ethics of sterilization of minors is discussed, whether sex education and contraception should be offered, or even if in-vitro fertilization for couples where one or both partners are developmentally delayed should be allowed<sup>3</sup>.

Through exploration of the right to procreate, privacy, medical ethics, and specific family circumstances, the current best solution is achieved through education of the complexity of the issue for all parties and clarity of guidelines for professionals. The arena of sterilization of the developmentally disabled continues to develop as more research and case studies are conducted. There is a delicate balance that must be maintained between protecting the rights of those disabled, respecting the wishes of the family, and following the ethics of medicine—all while under the watchful eye of the law.



Strong Love (2007), a documentary by Bonnie Burt, follows a couple both born with Down Syndrome over three years after they decide to get married.

<sup>1</sup> Begun, H. (2008). Empirical analysis of sterilization of mentally handicapped individuals in the united states. Journal of nursing student research, 1(2), 14-19. Retrieved from <http://repository.upenn.edu/>.

<sup>2</sup> Pham, H. H., & Lerner, B. H. (2001). In the patient's best interest? Revisiting sexual autonomy and sterilization of the developmentally disabled. Western journal of medicine, 175(4), 280-283. Retrieved from <http://www.ncbi.nlm.nih.gov>.

<sup>3</sup> Ryan, C. (2008). Revisiting the legal standards that govern requests to sterilize profoundly incompetent children: In light of the “ashley treatment,” is a new standard appropriate?. Fordham Law Review, 77(1), 287-326. Retrieved from <http://www.ncbi.nlm.nih.gov>.

<sup>4</sup> Utah Code Ann. §62-A-06-102

<sup>5</sup> Utah Code Ann. §62A-06-108

# Mental Health and the Law





# Mental Health, Substance Abuse, and Homelessness

Cedric Shaskey  
Thomas Wallace  
Yen Nguyen

Murray Barr was a homeless man diagnosed with mental illness and substance abuse problems; it was estimated that over the course of 13 years Murray cost the city of Reno \$1 million<sup>1</sup>. Unfortunately Murray's situation, having a mental illness combined with substance abuse problems and homelessness, is not unique. Increasingly studies are showing that the rates of mental illness, substance abuse and homelessness are strongly correlated.

The three leading causes of homelessness among singles are substance abuse, lack of affordable housing and mental illness. In a 2007 survey, two thirds of the homeless reported alcohol or substance abuse as a major contributor to their status<sup>2</sup> and in 2008, sixty-eight percent of cities reported substance abuse as the biggest cause of homelessness<sup>3</sup>. A staggering thirty-nine percent of the homeless report some type of mental illness<sup>4</sup>. In a 2006 Special Report, the Bureau of Justice Statistics (BJS) indicated that mentally ill inmates were significantly more likely to have used illegal drugs in the month leading up to arrest, have substance abuse or dependence, and have been homeless in the year leading up to arrest<sup>5</sup>. The connection between mental illness, substance abuse and homelessness is undeniable.

Although mental illnesses are the leading cause of disability in the United States, there remains a stigma that psychological conditions are not physical

diseases; they are not as severe. The Center for Disease Control and Prevention reports that 57 percent of all adults surveyed believe that people are caring and sympathetic to persons with mental illnesses while only 25 percent of adults with mental illnesses perceive that people are caring and sympathetic towards persons with mental illnesses<sup>6</sup>. The lack of community support and understanding aggravates the issues. Continued uncertainty of the mental stability of this population in the workforce has led to 70-90 percent unemployment<sup>7</sup>. Due to this, over two-thirds of adults



Christopher Onstott. "Debrah Douglas, a 55-year-old." Picture. Portland Tribune. May 5, 2011. <[http://www.portlandtribune.net/news/print\\_story.php?story\\_id=130454399633896700](http://www.portlandtribune.net/news/print_story.php?story_id=130454399633896700)> (Accessed April 2013)

and half of children with a diagnosable mental disorder do not seek mental health services in a given year<sup>8</sup>.

Many of those with mental illness that are not receiving adequate treatment turn to substance abuse as a means of self-prescribed treatment. Regardless of available treatment, one place that serves as a

consistent “catch basin” for the mentally ill is hospital emergency rooms. Emergency care is dramatically more expensive than other types of care and, with a heavy focus on lifesaving, are ill equipped to handle long term care of mental illness. Unfortunately, the most populated long-term facilities for mental health patients turn out to be prisons, an environment not suited to treating mental illnesses. In a 2006 Special Report, the Bureau of Justice Statistics (BJS) estimated that 705,600 mentally ill adults were incarcerated in State prisons, 78,800 in Federal prisons and 479,900 in local jails<sup>9</sup>. The current system has failed to properly handle millions of the country’s most vulnerable.

***To efficiently treat mental illness, substance abuse or homelessness, all three must be simultaneously addressed.***

To efficiently treat mental illness, substance abuse or homelessness, all three must be simultaneously addressed. Sadly, many programs for homeless people with mental illness do not accept patients with substance abuse problems and many programs that treat homeless people with substance abuse do not accept patients with mental illness. However, the American Recovery and Reinvestment Act appropriated thirty billion dollars to health information technology that would create a national database of electronic health records – this would be a huge step to more efficient and a broader-range of health care. It could streamline the diagnosis process and save millions in redundant testing. A program that is specifically designed to treat mental health would rely heavily on such technology because re-diagnosis is an epidemic within the mental health community and, in specific, the homeless and

mentally ill. Of course, such a program would also rely on increased funding, however if used effectively the savings would outweigh the cost. The program could easily be based out of an office, quite like Planned Parenthood, and would provide access to psychiatric doctors, prescription medication, and on-site counselors. This would help reduce delays between diagnosis and treatment as well as simplifying the process for impaired, disabled or homeless individuals. Outreach teams would be organized and sent to homeless shelters and other centers of homeless populations to educate them about their options. The professionals would also be available for tele-psychiatry through a hot-line or through direct appointment. The building could optimally be equipped

with one-night stay beds for mental health patients undergoing a psychotic episode. If sufficient funding were available, the program could offer temporary rehabilitation housing for patients that commit to community service and continual medication. The program would also target at risk adolescences – three-fourths of all lifetime mental illness cases start by age twenty-four<sup>10</sup>. Over fifty percent of students with a mental disorder (onset age 14 or older) drop out of high school, the highest rate of any disability group<sup>11</sup>, further exacerbating the issue of homelessness. The program could provide the type of long term and consistent treatment that is so lacking in many cases of mental illness.

<sup>1</sup> Malcom Gladwell. “Million Dollar Murray” (February 13, 2006). <[http://www.gladwell.com/2006/2006\\_02\\_13\\_a\\_murray.html](http://www.gladwell.com/2006/2006_02_13_a_murray.html)> (Accessed April 17, 2013)

<sup>2</sup> National Coalition for the Homeless. “Substance Abuse and Homelessness.” Published July, 2009. <[www.nationalhomeless.org/factsheets/addiction.pdf](http://www.nationalhomeless.org/factsheets/addiction.pdf)> (Accessed April 19, 2013)

<sup>3</sup> National Coalition for the Homeless. “Substance Abuse and Homelessness.” Published July, 2009. <[www.nationalhomeless.org/factsheets/addiction.pdf](http://www.nationalhomeless.org/factsheets/addiction.pdf)> (Accessed April 19, 2013)

<sup>4</sup> Hero House. “Facts about Mental Illness” <[www.herohouse.org/files/facts\\_about\\_mental\\_illness.pdf](http://www.herohouse.org/files/facts_about_mental_illness.pdf)> (Accessed April 19, 2013)

<sup>5</sup> Bureau of Justice Statistics. “Mental Health Problems of Prison and Jail Inmates.” (September 6, 2006). <<http://bjs.gov/index.cfm?ty=pbdetail&iid=789>> (Accessed April 17, 2013)

<sup>6</sup> Centers for Disease Control and Prevention, Substance Abuse and Mental Health Services Administration, National Association of County Behavioral Health & Developmental Disability Directors, National Institute of Mental Health, The Carter Center Mental Health Program. Attitudes Toward Mental Illness: Results from the Behavioral Risk Factor Surveillance System. Atlanta (GA); Centers for Disease Control and Prevention; 2012. <[http://www.cdc.gov/hrqol/Mental\\_Health\\_Reports/mental\\_health\\_reports.html](http://www.cdc.gov/hrqol/Mental_Health_Reports/mental_health_reports.html)> (Accessed April 17, 2013)

<sup>7</sup> National Alliance on Mental Illness

<sup>8</sup> National Alliance on Mental Illness

<sup>9</sup> Bureau of Justice Statistics. “Mental Health Problems of Prison and Jail Inmates.” (September 6, 2006). <<http://bjs.gov/index.cfm?ty=pbdetail&iid=447>> (Accessed April 17, 2013)

<sup>10</sup> National Alliance on Mental Illness

<sup>11</sup> National Alliance on Mental Illness



# Involuntary Civil Commitment

Alex Bennion  
Cynthia Chen  
Stevenson Smith

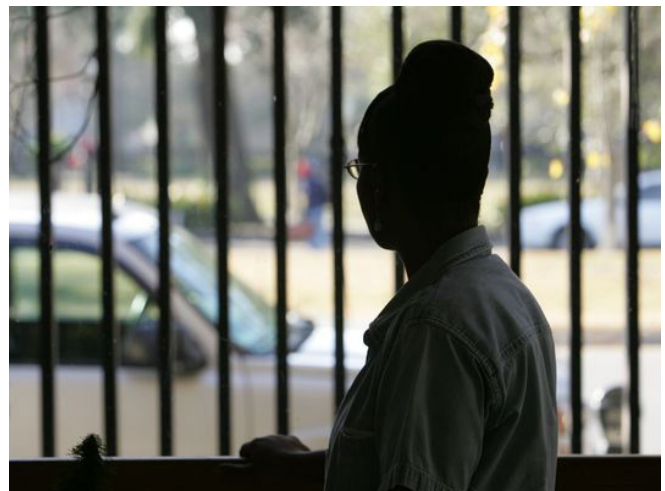
Law and medicine have a history of conflict, but there are occasions when the two professions have come together to create viable and lasting solutions. In the case of involuntary civil commitment, law and medicine have worked together to create legislation that attempts to set a framework to guide the treatment of the mentally ill. Laws governing involuntary civil commitment work well in cases of clear mental illness. However, the laws have the potential to impose serious repercussions, namely disregarding personal liberty and decision making, on individuals in cases where mental illness is not so clear.

*Laws governing involuntary civil commitment work well in cases of clear mental illness. However, the laws have the potential to impose serious repercussions, namely disregarding personal liberty and decision making, on individuals in cases where mental illness is not so clear.*

neglects the precious right of self-determination for competent human beings hoping to make their own decisions about death.

The conflict between law and medicine regarding involuntary civil commitment is most tangible in the treatment of suicidal, competent people. To be civilly committed, a physician must diagnose using the DSM, which depends entirely on qualitative and subjective diagnostic criteria. When determining whether civil commitment is appropriate or not, there is no distinction made between rational and irrational suicide—even when 80% of physicians agree that death could be the best option for an individual (Steve's citation). Improving tools used for diagnosing mental illness and separating mental illness from suicide (in some cases) would help alleviate this specific tension.

Schizophrenia, bipolar disorder, and major depression are all forms of mental illness that have the potential to cloud an individual's judgment—create an inconsistency between one's fundamental values and sound deliberation or reception of accurate information—which could force the ill individual to prematurely commit (or attempt to commit) suicide even though he or she does not truly desire to die. Utah's Involuntary Civil Commitment laws were created as a safety net to provide individuals who meet the criterion above with a sustainable and structured, albeit forced, treatment aimed at integration back into society. Unfortunately, in the law's attempt to protect these ill patients, it puts in place a system that accepts such a broad diagnosis of mental illness, which effectively



# The Competency Contingency

Stanford Escalante  
Joshua Southwich  
Kortnie Walker

Defining mental illness is a hefty proposal, as the field of psychiatry has been unsuccessful at pinpointing the disorder target since the specialty's inception. Although medically defining and diagnosing mental illness is difficult, it is necessary. Within the legal system defendants are tried according to their alleged crimes but must first be deemed competent to allow for due process and a fair trial. We pose the following question: Is the legal system competent to evaluate competency? Is it possible to extract concrete, absolute justice from vague, abstract psychiatry?

Two very distinct tensions exist between law and medicine around this subject: the tension between state interests and defendant rights and the tension between science and the evaluator. These tensions in conjunction often create the confusion and apprehension surrounding competency trials. The interests of the state include public safety, upholding the law, decreasing or minimizing costs, and obtaining facts regarding the case. On the other hand, upholding the defendant's Constitutional rights is also incredibly important. Amendment V<sup>1</sup> states that no person shall "be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law." Without competency trials, defendants could potentially be compelled to testify against themselves because they don't understand the gravity of the offenses levied against them.

While balancing state interests against human rights is important, it is the taxpayers who must pay for all of the court hearings, detainments, examinations, and all other resources required to process these defendants. A study done on the Pennsylvania correctional system in 2004 by the University of Alaska found that the average cost of incarceration per inmate

per day was \$80, and the average cost per day for a mentally ill inmate was \$140<sup>2</sup>. This translates to a 57 percent increase in the costs to tax payers per mentally ill inmate, an increase that compounds to staggering amounts when you take into consideration the number of people affected with mental illness.

With the percentage of inmates with recognized mental illness increasing 5-10 percent per year, the current system is not sustainable. At this rate, the cost of incarceration for inmates with mental illness will grow from 33 billion dollars per year to 53.75 billion dollars per year assuming the conservative growth rate of 5 percent. At 10 percent growth, the cost in ten years would be 85.59 billion dollars per year. The current process is not effectively managing the mental health population in our legal system. It is long and time inefficient for all parties involved and cannot be fiscally sustained.

Under the current state of the legal system, ev-

*Is the legal system competent to evaluate competency?*

everyone suffers when dealing with mental illness in the courts: taxpayers, attorneys, psychiatrists, and the defendants. Taxpayers pay the costs of housing inmates while they wait to be deemed competent, attorneys have the additional stress of dealing with a particularly ambiguous client, and the defendants could essentially forfeit their Constitutional right to a speedy trial.

Without overhauling codified law, there is a simple solution for part of this tension: pass legislation that prohibits the State from writing contracts that require diagnosing psychiatrists to definitively answer whether or not a defendant is competent enough to stand trial. We propose that the State offer the option of "maybe" to psychiatrists when evaluating defendants for competency, while still leaving the judge

to ultimately decide whether or not a defendant can stand trial.

Our legal system operates under the premise that sentences serve multiple purposes: punishment,

found guilty: should they be treated as healthy citizens, since justice is blind, or should attempts at rehabilitation be made in order to make them productive members of society? Should these considerations

*How should the legal system handle these defendants if they are found guilty: should they be treated as healthy citizens, since justice is blind, or should attempts at rehabilitation be made in order to make them productive members of society?*<sup>8</sup>

rehabilitation, deterrence, etc. The reason why tension exists between the mental health community and the legal system is because there is an added (albeit ambiguous) variable concerning those who are not considered mentally competent to stand trial. How should the legal system handle these defendants if they are

pertain to all found guilty, and what balance should there be between justice and mercy? Obviously there are no easy answers to these questions, but if the goal of a society is functioning as efficiently as possible, it would be wise to invest in rehabilitating mentally ill criminals.



<sup>1</sup> "Amendments to the Constitution of the United States of America." FindLaw For Legal Professionals. Web. 17 Oct 2012. <<http://caselaw.lp.findlaw.com/data/constitution/amendments.html>>

<sup>2</sup> Moras, Antonia. "Alaska Justice Forum." Alaska Justice Forum. 21.1 (2004): n. page. Web. 15 Oct. 2012. <[http://justice.uaa.alaska.edu/forum/21/1spring2004/b1\\_mentallyill.html](http://justice.uaa.alaska.edu/forum/21/1spring2004/b1_mentallyill.html)>.

# Drugs and the Law



Martin Hodgson and Nicholas Watt. "Drug firms face new laws on test results." Picture. The Guardian. March 5, 2008. Accessed April 17, 2013. <<http://www.guardian.co.uk/science/2008/mar/06/medicalresearch.drugspolicy>>



# High Fructose Corn Syrup

*William Bennion, Cedric Shaskey, Kortnie Walker, Thomas Wallace*

Choosing a topic for our Think Tank's final project was not as straightforward as one might imagine. The process consumed several of our three-hour weekly discussions before a final project was agreed upon. During each of these discussions, students would propose an idea and as a class we would analyze the feasibility, impact, sustainability, and achievability of each. A topic that I proposed and became quite passionate about focused on the health impacts of high fructose corn syrup on children. This topic was inspired by the national rhetoric addressing high fructose corn syrup and the module of our class addressing the intersection of law and medicine with respect to drugs. Within the framework of our class, I argued that high fructose corn syrup should be considered a drug - one that has virtually no legal guidelines and yet is strongly contributing to the development and progression of diabetes and obesity. During our discussion, we identified and were disturbed by the fact that public schools receive large amounts of funding from corporations that make exclusive distribution contracts of high sugar content drinks and snacks to the very same schools.

To address this issue within Utah's public school system, we came up with the idea of proposing a legislative bill that would implement a sugar content tax, much like the "fat tax," on all low nutrient and high sugar foods and drinks that are distributed in our public school systems. The revenue from this sugar tax would be used to establish a growing fund, which after several years would be funneled back into our public schools. The goal of this project was two fold: 1) push high sugar and low nutrient content foods and drinks out of the public schools; 2) combat the rising childhood obesity rates and promote healthier childhood eating habits.

This project, despite its relevancy to current national issues, lost its steam within the think tank. As a group we failed to identify a clear-cut tension between laws addressing high sugar con-

tent foods and drinks and medical issues related to their consumption. Additionally, we became intimidated by the political sway that food and beverage corporations hold over legislatures and doubted our ability to make an impact in the short three and a half months we had to carry out our project. Due to these issues, our class discarded high fructose corn syrup as a final project idea and resumed the genesis of new ideas. Despite the failures of this particular project, I think that the class gained invaluable insight to the process of idea generation and analysis, which would come to serve us well in the weeks that followed.



THE AVERAGE AMERICAN CONSUMES 3 LBS OF SUGAR EACH WEEK OR  
**3,550 POUNDS** IN AN ENTIRE LIFETIME

THAT'S ABOUT  
**1,767,900 SKITTLES**

OR ENOUGH  
**Sugar**  
 TO FILL AN  
 INDUSTRIALIZED  
**Dumpster**

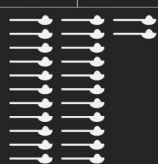


AMERICA HEART ASSOCIATION RECOMMENDATION:

NO MORE THAN  
**9.5 TEASPOONS**  
 PER DAY

THE AVERAGE ADULT:

**22** TEASPOONS  
 PER DAY



THE AVERAGE CHILD:

**32** TEASPOONS  
 PER DAY



*Biggest Culprits*

REGULAR SOFT DRINKS	33.0%
SUGARS AND CANDY	16.1%
CAKES, COOKIES, PIES	12.9%
FRUIT DRINKS	9.7%
DAIRY DESSERTS AND MILK	8.6%
OTHER GRAINS	5.8%

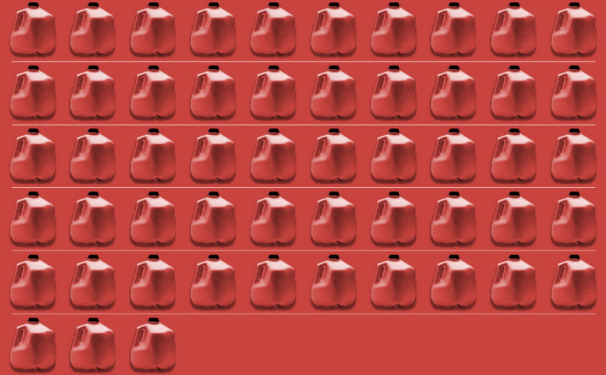


MORE SUGAR THAN 2  
 FROSTED POP TARTS AND  
 A TWINKIE COMBINED



AVERAGE AMERICAN:

**53 GALLONS**  
 OF SOFT DRINKS PER YEAR



IN THE AMERICAN DIET

ADDED SUGAR ALONE  
 ACCOUNTS FOR NEARLY

THE CALORIC EQUIVALENT  
 OF 10 STRIPS OF BACON

**500 CALORIES**  
 EVERY DAY

**EVERYDAY**



AMERICANS CONSUME  
**10 TIMES MORE SUGAR THAN**  
 OTHER FOOD ADDITIVES [BESIDES SALT]

REFINED SUGAR HAS NO  
 NUTRITIONAL VALUE.



0 VITAMINS  
 0 MINERALS  
 0 ENZYMES  
 0 FIBER

REFINED SUGAR IS LINKED TO:

OBESITY	NERVOUS TENSION
HYPERTENSION	ACHING LIMBS
HIGH BLOOD PRESSURE	DIABETES
HYPOGLYCEMIA	ACNE
DEPRESSION	SKIN IRRITATION
HEADACHES	STIFFENING OF ARTERIES
FATIGUE	VIOLENT BEHAVIOR

ACCORDING TO BRAIN SCANS,

*Sugar*



IS AS  
**ADDICTIVE**  
 AS

*Cocaine*



ONLINENURSINGPROGRAMS.COM

REFERENCES:

[HTTP://WWW.BUSINESSINSIDER.COM/CHART-AMERICAN-SUGAR-CONSUMPTION-2012-2#ixzz1X95ZDPZK](http://www.businessinsider.com/chart-american-sugar-consumption-2012-2#ixzz1X95ZDPZK)

[HTTP://WWW.KGBANSWERS.COM/HOW-MANY-SKITTLES-MAKE-A-POUND/7522970](http://www.kgbanswers.com/how-many-skittles-make-a-pound/7522970)

[HTTP://WWW.LIVESTRONG.COM/ARTICLE/292069-CALORIES-IN-A-PACK-OF-SUGAR/](http://www.livestrong.com/article/292069-calories-in-a-pack-of-sugar/)

[HTTP://WWW.MSNBC.MSN.COM/ID/32543288/NS/HEALTH-DIET\\_AND\\_NUTRITION/T/CUT-BACK-WAY-BACK-SUGAR-SAYS-HEART-GROUP/#.T9E7UPLYVQW](http://www.msnbc.msn.com/id/32543288/ns/health-diet_and_nutrition/t/cut-back-way-back-sugar-says-heart-group/#.T9E7UPLYVQW)

[HTTP://WWW.LIVESTRONG.COM/ARTICLE/283136-HOW-MANY-TEASPOONS-OF-SUGAR-ARE-IN-A-CAN-OF-COKE/](http://www.livestrong.com/article/283136-how-many-teaspoons-of-sugar-are-in-a-can-of-coke/)

[HTTP://WWW.SUGARSTACKS.COM/](http://www.sugarstacks.com/)

[HTTP://WWW.CSUN.EDU/SCIENCE/HEALTH/DOCS/TV&HEALTH.HTML](http://www.csun.edu/science/health/docs/tv&health.html)

[HTTP://ARTICLES.NYDAILYNEWS.COM/2012-04-02/NEWS/31276928\\_1\\_HIGH-FRUCTOSE-CORN-SYRUP-SUGAR-CONSUMPTION-TABLE-SUGAR](http://articles.nydailynews.com/2012-04-02/news/31276928_1_high-fructose-corn-syrup-sugar-consumption-table-sugar)

[HTTP://WWW.NYTIMES.COM/2011/04/17/MAGAZINE/MAG-17SUGAR-T.HTML?\\_R=1&PAGEWANTED=ALL](http://www.nytimes.com/2011/04/17/magazine/mag-17sugar-t.html?_r=1&pagewanted=all)



THIS WORK IS LICENSED UNDER A CREATIVE COMMONS LICENSE.



# Records and Rule-Breakers:

## *A Look at Performance-Enhancing Drugs*

*Joshua Southwick, Stanford Escalante, Steve Smith,  
Yen Nguyen, Cindy Chen*

**Y**ou are a student studying for three finals the next day. Your friend offers you a pill that gives you temporary increased focus and concentration and enhances your ability to understand concepts. You know you need to get As on these tests for any hopes of attending a good graduate school or getting hired for a high-end job. Your friend tells you there are no inherent detrimental risks (either negative physical or mental) and there are no tests out there that can detect the drug. However, your class has a strict honesty policy that states that this is considered cheating to use any type of performance-enhancing drug.

The question is: *Would you take it?*

On the left are potential test questions as they appear on your exam. On the right is how your brain interprets the question while on the “magical” pill.

1. The composer Leonin (fl. 1150s-1201) was highly influential to the development of polyphonic music because of his use of which compositional technique?
  - a. the use of parallel organum
  - b. the use of major seventh chords
  - c. the introduction of modulations
  - d. the use of organal and discantus style organum
2. What is the effective annual interest rate if the Annual Percentage Rate is 10% compounded quarterly?
  - a. 10.26%
  - b. 10.52%
  - c. 10.76%
  - d. 10.38%
3. Which of the following artists is paired with the correct artistic period?
  - a. Albrecht Durer; Baroque
  - b. Eugene Delacroix; De Stijl
  - c. Claude Monet; Impressionism
  - d. Piet Mondrian; Romanticism
4. How many stereocenters (chiral carbons) would you expect to form after reacting a bis-protected tryptophan methyl ester with N-chlorosuccinimide?
  - a. 1 stereocenter
  - b. 2 stereocenters
  - c. 3 stereocenters
  - d. No stereocenters are formed in this reaction

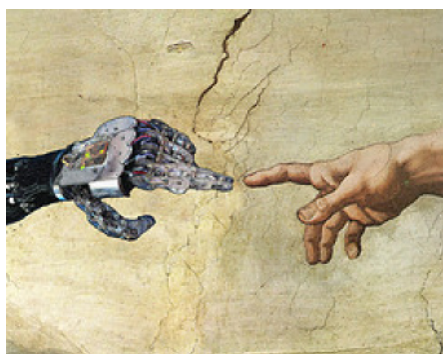
1. The composer Leonin (fl. 1150s-1201) was highly influential to the development of polyphonic music because of his use of which compositional technique?
  - a. he invented the world's first tuner
  - b. he was the father of Ludwig Van Beethoven
  - c. orchestrating a full garage band
  - d. the use of organal and discantus style organum
2. What is the effective annual interest rate if the Annual Percentage Rate is 10% compounded quarterly?
  - a. Too complex to answer
  - b. APR is meaningless, just borrow and never pay it back
  - c. 10% interest rate is usurious, irresponsible, disgusting!!!!
  - d. 10.38%
3. Which of the following artists is paired with the correct artistic period?
  - a. King Tutankhamen (“King Tut”); Renaissance
  - b. Picasso; Ancient Sumerian/Babylonian
  - c. Claude Monet; Impressionism
  - d. Leonardo Da Vinci; Post-Modernism
4. How many stereocenters (chiral carbons) would you expect to form after reacting a bis-protected tryptophan methyl ester with N-chlorosuccinimide?
  - a. -18.7 stereocenters
  - b. 2 stereocenters
  - c. Approximately one thousand stereocenters (variable by reaction rate)
  - d. “Stereocenter” is a made-up word used to trick students

Answers: 1) D 2) D 3) C 4) B



Which test seemed easier? As you can see, it'd be tempting for any high-achiever to want to take anything that would give them an edge up against their competitors. With the use of performance-enhancing drugs (PEDs) a widely discussed issue in today's sports as well as in academia, questions arise concerning law and ethics, medical advancements, societal perceptions, and possible solutions to deal with the rising problem of PEDs.

With medical technology advancement, arguments have been made that everyone has been artificially enhanced in some way as technology has progressed. As we have seen each Olympics, world records are increasing—people are running faster, jumping higher, enduring longer—and this has been through the help of better training, mon-



itoring, treatments, etc. The line between natural and artificial has been blurred.

However, with some of these medical advance-

ments, such as vaccinations, antibiotics, and medications, society has accepted, while others, such as PEDs, the law and regulations have continued to act as a wall. While the government itself has only set restrictions on the use of steroids (for treatments deemed medically necessary by physicians) as a Schedule III controlled substance, it is with governing agencies for sports that has set the highest regulations on PEDs.

The World Anti-Doping Agency (WADA) is an international, independent agency led by the International Olympic Committee. They coordinate and monitor drug use in sports and is recognized by over 600 sports organizations. For them, PEDs may take the form of steroids, painkillers, stimulants, sedatives, diuretics, and blood boosters. As the main enforcing agency, any athlete caught taking PEDs would be immediately disqualified, stripped of their medals, and possibly banned from future competitions.

However, the strong negative image portrayed by regulatory agencies to the public does not

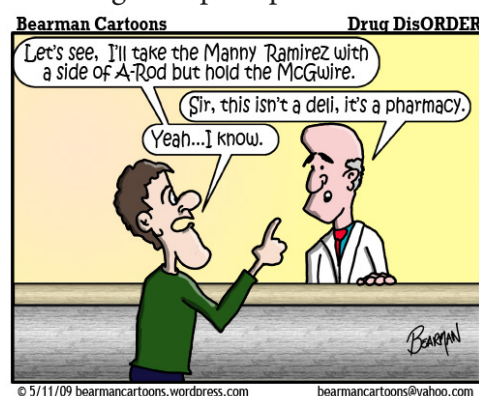
seem to affect the public's image of these athletes who use PEDs. Society encourages this behavior to get faster, stronger, and better. With each competition, people want to see amazing feats and are looking for the "wow" factor, no matter what the costs. Since Lance Armstrong's doping allegations in August 2012, support for his charity increased by 15 percent and dollar amount donations increased by 8 percent. This rise has continued even after the athlete admitted to doping.

Proponents make the argument that the use of these drugs would not necessarily make an athlete better; rather, PEDs boost one's innate ability, but one would also need natural talent and work ethic. While it wouldn't make an average person an Olympic-level competitor, PEDs could help an athlete who has above-average abilities reach the next level (but only to a limit). These drugs can also be used to kickstart an athlete into top shape after an illness. These performance-enhancing drugs often may serve as a balance to the many inherent advantages that some people have (i.e. socioeconomic factors, genetics, etc.), bringing fairness to the field.

Options for reducing black market sales of PEDs includes deregulation or legalization of performance-enhancing drugs. It would be safer for the athlete to obtain and take PEDs under the direction of a physician rather than "shooting-up" in the locker room. Social change through education can also be utilized to change the perception of PEDs.

As science has progressed, it has been found that PEDs are not too detrimental to one's health when used in a controlled and supervised envi-

ronment. Community awareness and education on PEDs, nutrition, and training (for professional and high school athletes and coaches) needs to increase so that while consumption of PEDs may continue to increase, at least they are used in a safe manner.







# Think Tank Project



# **Reduce the Abuse:**

## **A Think Tank Initiative on**

### **Post-Prescription Management**

#### *Abuse, Addiction, and Overdose.*

These words typically conjure up images of back alleys, shady drug deals, and the illicit street market, but across the nation a new epidemic originates much closer to home -- to be precise, the medicine cabinet. In the last decade, misuse of prescription drugs has caused exponential increases in addiction, hospitalization, and overdose death. Furthermore, this problem does not start only in the “back alleys”, it starts primarily within our very own homes. In over 67% of reported opioid misuse, the drugs come from family and friends, be it bought, stolen, or simply given.

To combat this deadly issue, our group’s goal is five-fold: first, to raise awareness about prescription drug abuse and post-prescription management within the community; second, to promote responsible use, storage, and disposal; third, to educate medical professionals, especially prescribing physicians, about their responsibilities for post-prescription management; fourth, to pioneer HIT (Health Information Technology) to facilitate post-prescription management; and fifth, to draft a bill to legalize safe and effective redistribution of unused prescription medications.

#### *What is post-prescription management?*

Post-prescription management is the notion that what happens *after* a prescription has been written is important to the patient, to the prescriber and to the community at large. It is the notion that a physician’s commitment does not end with a signature on the prescription pad.



# *The Plan of Attack:*

## *The Curriculum Group:*

The purpose of the education portion of the project was to use the information that we have gathered through our collective research to attack the problem of prescription drug abuse from the ground up. By addressing the problem directly to medical students, we will be getting future health care providers to think about the issue of post-prescription management early in their careers. The idea was to get the information about disposal and prescription management to the public by way of their health care providers in a grassroots type of campaign. The two main goals to our portion of the project were effectively disseminating information and creating a lasting impact. We wanted to find a way to bring this information to as many people as possible. We also hoped to create structure and curriculum for information on drug disposal to be passed on to others in the future.

## *The Legislative Group:*

Each year, hundreds of thousands of pounds of unused prescription drugs are thrown out in the trash, flushed down toilet, or incinerated. In order to decrease waste, this portion of the Think Tank turned towards drug recycling. The goal of this sub-topic consists of two parts: propose a new statute that clarifies Utah law concerning drug recycling and to organize a protocol allowing clinics, nursing homes, and hospices to become part of a state-run drug repository program. By working with the Utah Board of Pharmacy and Utah legislators, we can clarify the law to allow individuals the ability to donate to not-for-profit clinics as well as reassure health care facilities that it is legal for them to donate unused, un-tampered drugs.

## *The Technology Group:*

Our goal is to collaborate with a healthcare organization to develop an integrative software technology that merges islands of data into one efficient database that facilitates data-driven prescribing practices, post-prescription management, and enhances the patient-physician experience.

# The Curriculum Group

To achieve these goals, our project needed to happen in two folds. First, we needed to develop an effective curriculum in a presentation form. In forming the presentation, we evaluated the information we have gathered and decided what measures can be taken to prevent prescription drug abuse. After the creation of a curriculum we needed to find a forum to present our findings. We created partnerships with several local organizations, including the University Of Utah School Of Medicine, University of Utah College of Nursing, as well as the government organization Use Only As Directed. The schools gave us platforms to create a more permanent structure, while Use Only As Directed provided community support for our project. Creating a lasting structure was the second part of our project. While it was important to create and present an informative presentation to the nursing and medical schools, it was just as important to find a way to permanently integrate the information into the curriculum. Through our professor, Dr. Kirtly Jones, we have managed to get our presentation and information to the curriculum committees of both schools.

In looking towards the future, it is not enough to just present our curriculum to a couple classes. We hope to see that the idea of post-prescription management sticks in the minds of all our future health-care professionals. As we are moving towards a more personalized approach in healthcare, post-prescription management is an idea that really has its place in the future. The only way to ensure that the idea continues to carry is to work on it now. We need to continue pushing for the idea in the professional world and the community at large.



Utah is among the top states in abuse and addiction to prescription drugs (4th in nation-wide overdose rate, only behind NM, WV, and NV). The top counties for abuse include Davis and Salt Lake counties. Over the past few decades overdose drug death has been increasing at an exponential rate even when accounting for population increases, causing the CDC to classify prescription drug abuse as an epidemic in 2012.

In a national survey, over 71% of young adults aged 18-25 reported getting their latest opioid high from a friend or relative with less than 5% purchasing them from a drug dealer. This means most non-medical abusers are getting their drugs from out of the medicine cabinet and not in “shady street deals.”

## Food and Drug Administration (FDA) Best Practice Recommendations

### Safe Storage

Keep a general account of prescription medications and store safely in a medicine cabinet away from potential misusers.

### Safe Disposal

There are drug collection boxes at several police stations all across the Salt Lake valley. Most boxes are open 24/7. Just drop them off and the police will incinerate it for you.

The DEA holds take back days bi-annually for people in the community to drop off their unused prescriptions. Watch out for these days (usually in April and September).

If neither of these options are convenient, simply remove pills and label from their bottles and combine pills with an undesirable substance (coffee grounds, pet litter, etc.) and throw them in the trash.

This is the preferred route because flushing down the toilet or wasting down the sink adds substances into the water supply that cannot be separated out, whereas in landfills, the dumps are lined and the water contaminant levels are closely monitored.

### For More Information

[FDA.Gov](http://FDA.Gov)

[UseOnlyAsDirected.Org](http://UseOnlyAsDirected.Org)

[CDC and NIH Websites](#)

[DrugAbuse.Gov](http://DrugAbuse.Gov)

# The Legislative Group

A holistic approach to post-prescription management must acknowledge that, unintended consequences aside, prescription drugs play an integral and necessary role in the health and well being of healthcare patients. While it is popular to only focus on the people who are recklessly using illegal prescription drugs, it is essential to not forget about the people who are recklessly not using their legally prescribed medications. A significant group of people who fit in this latter category are those who (for whatever reason) do not have insurance and cannot afford their necessary medications. This think tank has discovered a crucial flaw in current post-prescription management practices in the state of Utah that has completely neglected these people in need: the lack of comprehensive and effective prescription drug donation laws and programs.

Prescription drugs are expensive and many people simply do not have the means to pay for them. A Commonwealth Fund study found that 59% of adults with a chronic illness (such as diabetes or asthma) sometimes went without their medications because they could not afford them<sup>1</sup>. Another study found that 1.3 million people with disabilities did not

take the medications they were prescribed because of cost. This led to over half of these patients having further, unnecessary health problems<sup>2</sup>. The truly sad thing about this situation is that at the same time that so many people go without their medications, institutions and individuals all across the state and the country are simply throwing these much-needed drugs in the garbage. As a think tank, we have called numerous hospitals, nursing homes, and hospices across the state only to find that these institutions are destroying “truck loads” of unused medication every year. No formal study has been issued to address this problem of waste in the state of Utah specifically, but a study performed in the similar state of Oklahoma found that its nursing homes alone destroy between \$3 and \$10 million dollars worth of unused prescription drugs per year. These numbers are wasteful, and the seriousness of this waste becomes alarmingly apparent once juxtaposed next to the millions of Americans who cannot afford to fill their medications.

Fortunately, many states are taking the initiative to implement laws that promote safe and effective drug donation to help mitigate this problem. Two laws this think tank has played close attention to—and even modeled our own proposal on—are from the states of Arizona and Iowa. Each state has developed comprehensive drug donation laws that allow both medical institutions and individuals to donate their unused drugs to those in need of these same medications. While Arizona’s law is still in embryo form, Iowa has already seen enormous results. Since the law’s implementation in 2007, 4.8 million dollars worth of medication has been donated, and over 23,000 Iowans have been served. People living in poverty with diseases such as asthma, diabetes, cancer, depression, etc. were able to receive much needed medications that they otherwise couldn’t afford—medications that would have been simply thrown



---

<sup>1</sup> <http://www.commonwealthfund.org/Publications/Fund-Reports/2006/Apr/Gaps-in-Health-Insurance--An-All-American-Problem.aspx>

<sup>2</sup> <http://www.ncbi.nlm.nih.gov/pubmed/12084695>

<sup>3</sup> Utah code 58-17b-503



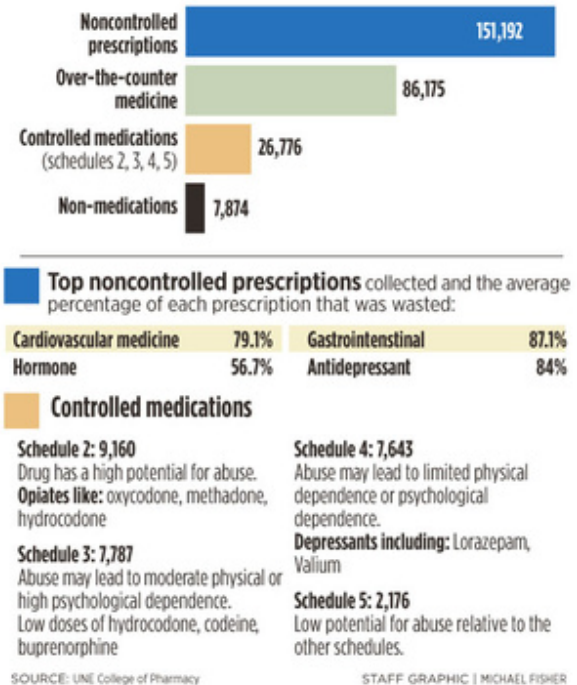
away. This achievement in Iowa should be a model for the nation.

Unfortunately, Utah is far from reaching this model. Utah only has one law regarding prescription drug reuse, and it states that pharmacies can collect (and then redistribute) unused drugs from nursing care facilities, state hospitals, care facilities for those with intellectual disabilities, state prisons and county jails. Notably missing from this list of accepted donors are regular hospitals and individuals. Only the original dispensing pharmacy can collect these drugs, and they must be in their original sealed containers.<sup>3</sup> This law has several shortcomings. First, as already mentioned, it excludes a sizable group of potential donors—most notably hospitals and individuals—and thus wastes thousands of medications that could have been used to help those in need. Second, it requires the pharmacy to act as a middleman and does not allow the aforementioned facilities to donate their unused drugs themselves. Furthermore, it does not even require the pharmacy to then donate these drugs to charity. The pharmacies are allowed to resell these drugs and make additional profits on products they have already sold once—circumventing the very reason a state would want to allow prescription drug donation in the first place. Lastly, due to either a lack of motivation, or a lack of knowledge, medical facilities that can return unused drugs to their pharmacies currently are not and have instead opted to destroy and waste perfectly good medications. Clearly, this law needs a tremendous amount of revision.

This think tank has found several ways to revise and innovate Utah's current law regarding prescription drug donation. Moreover, we have thought of many ways to ensure that this law will be effective once implemented—that it actually will result in serving thousands of Utahans that (for whatever reason) need financial assistance in filling their medications. We have shared our results with the Utah Board of Pharmacy, as well as several state legislators. The following page contains our proposal.

## Drug take back

The state of Maine regularly collects unwanted or expired prescription and over-the-counter medications in drug disposal programs sponsored by the U.S. Drug Enforcement Administration. Below are the total doses of medications collected at seven collection sites in Maine during two drug takeback events in 2011 and one in 2012.



*Utah Drug Enforcement Agency (DEA) holds biannual drug take-back days similar to this one in Maine. Non-controlled prescriptions were collected in the highest amount. With legislation to allow individuals and health care facilities to donate their unused, untampered medications, much needed medications such as cardiovascular medicines, hormones, and antidepressants can be redistributed to those in need-- particularly those in the low-income bracket.*

## Prescription Medication Repository/Donation Program

A Board shall establish a prescription medication repository program to accept and dispense prescription medication that is in its original sealed and tamper-evident unit dose packages. Medication may not be accepted if they are within six months of their expiration date.

- (1) Individuals, manufacturer or health care institutions (including hospices and nursing homes) may donate prescription medication to a pharmacy, hospital, or nonprofit clinic that participates in the drug repository program and meets requirements as prescribed by the Utah State Board of Pharmacy.
- (2) A pharmacy, healthcare institution or nonprofit clinic that participates in the program must dispense donated prescription medication:
  - a. Either directly or through participating governmental or nonprofit private entities
  - b. Only pursuant to a prescription order
  - c. Only to a recipient who is a resident of this state and who meets the eligibility standards prescribed by the Board of Pharmacy.
  - d. Before dispensing prescription medication, the pharmacy, hospital or nonprofit clinic must:
    - i. Comply with all applicable federal laws and the laws of this state dealing with the storage and distribution of dangerous drugs
    - ii. Must examine the donated prescription medication to determine that it has not been adulterated
    - iii. Persons and entities participating in the program as prescribed board rules are not subject to civil liability or professional disciplinary action
- (3) The Board shall adopt rules prescribing the following:
  - a. Eligibility criteria for pharmacies, hospitals and nonprofit clinics to receive and dispense donated prescription medication
  - b. Standards and procedures for accepting, storing, and dispensing donations
  - c. Standards and procedures for inspecting donations to determine that the original unit dose packaging is sealed and tamper-evident and that the donated prescription medication is unadulterated, safe, and suitable for dispensing.
  - d. Eligibility standards for persons receiving donated prescription medication, based on economic need and means to prove they are eligible to receive donated prescription medication
  - e. A form each individual must sign stating that the donor is the owner of the prescription medication and wishes to voluntarily donate the prescription medication to the repository
  - f. A list of prescription medication, arranged either by category or by individual drug that:
    - i. The repository may/may not accept from individuals
    - ii. The repository may/may not accept from a health care institution
    - iii. This rule extends to non-schedule analgesics, antidepressants, antihypertensives, hormones, antibiotics, and diabetic medications and may be opened up to narcotics
  - g. Any other standards the Board determines are necessary and appropriate
  - h. A dispenser of donated prescription medication may not submit a claim or otherwise seek reimbursement from a public or private third-party payer for the donation

# The Technology Group

Our project was the result of a novel ideal from one of our group members, Stanford Escalante, and was developed in our small group of three undergraduate students (Stanford Escalante, Alex Bennion, and Rachel Barnes). After looking at the data that was provided by Dr. Jacob Calvert, we saw that there was a hole in the currently available data, and that there was a significant opportunity in this area. We set out to develop a program to track and monitor medications after they have been prescribed, in order to improve future prescribing practices and increase personalization of care.

The first stage of the project was to research what data is currently being collected. Again, we looked to Dr. Calvert's research as a piece of our model. We also assessed the current scope of the DOPL program in the state of Utah, and looked at the programs that are being used in other states. Our research provided us with a valuable starting point, and helped us to define the area that we would eventually focus on.

Our next step was the most exciting and invigorating portion of the project. The three of us got together to brainstorm and develop our ideas into a cohesive project. Our idea grew and evolved considerably throughout this process, and we were able to combine and refine the ideas that we had each developed during the first portion of the semester. This part of the process really was the perfect example of how a small group project should function, with each of us contributing ideas and all of us synthesizing these ideas into something cohesive and concise.

Finally, we developed our program and created a presentation pitch in order to advance the idea. We identified the opportunities and benefits of the program, and provided a simple outline and structure. With this presentation, we were able to refine our own presentation skills. We have already had the opportunity to present the idea, and have additional opportunities scheduled in the future.

Throughout this process we have had truly unlimited academic freedom, which is a unique opportunity during the undergraduate experience. Our professors have provided valuable guidance and opinions throughout the process, and their ideas have been woven into our project. The program idea was sparked by the vision of an undergraduate student, and together as a group, we have had the chance to create something truly original.



# Hindsight: Personal Reflections

---



## *Cedric Shaskey*

A man in a suit strolling by gestures, “Hi, are you looking for the mental health court?”

“I am in fact; will you show me where it is?” I reply.

“No problem, I’m headed there myself. By the way, my name is Conrad.”

“Nice to meet you, I’m Cedric.”

We respectfully shook hands and he proceeded to lead me down the corridor and around the corner to a set of large wooden doors.

“Here we are,” as he looks down at his watch, “We’re here a bit early so I’ll explain to you how this is going to work. First of all, everyone working for the court has your best interest at heart, but either I or Barbara will be your official advocate -”



Suddenly I realized, “Oh, I think you have me confused; I’m not a patient. I’m here to observe the court – I’m part of Judge Atherton’s Think Tank.”

After a round of laughs Conrad jests, “Forgive me, but it can be difficult to tell the difference between a college student and a patient.”

I soon found out that there was plenty of truth behind his last statement. The subjects of the mental health court seemed to come from all ages, races, and socioeconomic backgrounds. As they filtered into the courtroom conversation arose everywhere – I felt a little awkward with all the friendly commotion inside what is usually such a somber atmosphere. Conrad was being pulled at on all sides as his clients clamored to tell him stories of their successes this week and to ask him for help with their obstacles. It was obvious, all of his clients looked up to him not as a lawyer or legal protection but as a friend, role model and guidance counselor. It seemed as if they were all working together and Conrad was their leader. Every time someone would complain of a temptation or obstacle everyone would start throwing out how they coped with a similar problem or ways that they could help alleviate the problem, but they would always look to Conrad for approval. After some time of this group problem solving the commotion started to die down and people started taking their seats. Not long after our very own Judge Judy made an appearance. She began to call people up to the podium one at a time – beginning with the Rocket (a list of everyone who had successfully completed all their duties in the past week). When they reached the podium Judge Atherton would go over everything they had done successfully in the week and how they had improved, she would congratulate them and then, in most cases, she would tell them their duties for the next week and excuse them to applause from the rest of the court. In a few cases, patients had missed deadlines or failed to complete duties and the judge would take some time to ask why they had done so and how she or anyone else employed by the court could help them, then reassign their duties and excuse them to applause from the court. After everyone had had their friendly dialogue with the judge, their advocate and doctors the bustle started to rise again. A few patients that had immediate duties glided towards the doors. Next came in the support groups offering all types of services: group discussions, free food, medication subsidies, transportation, job opportunities, child care, just to name a few. After their presentations the court was adjourned and people slowly started dissipating.

I joined the Think Tank on the Uneasy Intersection between Law and Medicine for many reasons. I am a physics major who is unsure of my career path. I have done research in a laboratory; however, this did not satisfy me. I have also thought about both law and medical school as well as engineering. My father is a medical doctor, so I have familial influences, both positive and negative, towards the medical field. This experience that is the Think Tank helped me learn more about both fields as well as improve my speaking, writing, presenting and flat-out thinking ability. The only possible downfall of the Think Tank is that my interests have been further diversified. The Think Tank encouraged many points of view and thus created an amazing environment for brainstorming and problem solving. I am extremely grateful to the faculty advisors who spent countless hours organizing such a diverse group of students, guest speakers and topics. I am also grateful to the guest speakers who happen to be some of the most influential people in Utah; it was great not only hearing from them but being able to respond and be heard. Overall, the Think Tank was the most innovative, inspiring and intensive class I have taken; I will never forget the perspectives I have attained.

### *Cynthia Chen*

I applied to be in this think tank because, a year ago, I thought I was interested in pursuing a career in law. My goals have since changed, but the experiences I have gained in this think tank are experiences I can carry with me to any career. In this think tank I have learned about the importance of different perspectives on the collaborative process, the value of patience in team work, and the necessity of understanding how an individual's role fits into a larger group. Besides internalizing these abstract concepts, I have also learned a lot about healthcare and the legal issues that are often associated with the field. Although I am not interested in pursuing a career in health, understanding the issues in healthcare is the best way for me to remain an informed and responsible member of society.

As a flute performance major, there have been times throughout the year when I have wondered what I am doing in a classroom full of future health care professionals and lawyers? What do I have to bring to the table? This brings me back to the lessons I have learned about the collaborative process. Sometimes the best ideas are stimulated by being around people who have different points of view. I came to realize that I what I had to offer this group was that I did not see this think tank through the lens of a future doctor or lawyer. I saw this think tank through the lens of a consumer of healthcare.

Understanding that my perspective is different, but valid also helped me define my individual role in the group. As we worked on our post-prescription management project, I found myself working in the group that dealt with education and outreach. I was drawn to working with this group because education and outreach has the largest direct effect on people who I relate to the most, other healthcare consumers. In the end, I was able figure out how to apply my unique strengths to the large group project. This year has been a year of growth and exploration and I hope to see the idea of post-prescription management take on a life of its own even after the end of this project.

### *Kortnie Walker*

Originally, I wasn't chosen to be a part of this Think Tank but was rather an alternate invited to join after a student dropped the class at the beginning of the year. With that, I jumped into the Think Tank with kind of a need to prove myself to the rest of the group, considering they were all the "first choices" for the cohort. After five minutes in my first class I realized that my peers were there to learn, not to judge. From there, the Think Tank became my most engaging class.

Spending the school year as a member of the "Uneasy Intersection of Law and Medicine" Think Tank was certainly an adventure. I was challenged both intellectually and mentally as we investigated different aspects concerning the tension between these two fields. Although we spent an entire semester dealing with a variety of different issues (beginning of life, mental health, drug abuse, etc.), we barely scratched the surface.

After stretching our minds learning about the existing tension between law and medicine, the real work began. The ultimate goal of this Think Tank was to collectively design and implement a meaningful semester project that would, in some way, reduce this tension. This was perhaps the most difficult part of the semester, as everyone had different ideas and interests. Eventually we were able to settle on prescription drug abuse, but not without some casualties; some members of the Think Tank elected to leave either because they couldn't commit the time necessary for this project or they didn't agree with the direction of the Think Tank altogether.

Overall, I'm so grateful for the opportunity I had to interact with peers that shared an interest in this field, but also had interests and talents in other areas. The diversity in our cohort really made this class worthwhile, and I hope to experience this same level of creativity as I continue my education.

## *Rachel Barnes*

When the Honors College released the topics for the Think Tanks for the 2012-2013 academic year, the Uneasy Intersection of Law and Medicine jumped out at me immediately. Unfortunately, I had a class scheduling conflict and was unable to be a part of the Think Tank during the fall semester. When I appealed to the professors to add me for spring semester, I had no idea what this group would actually be able to explore and accomplish during our seemingly short amount of time together.

I came into the class in November, after spending the fall semester in the “Patient Experience Project” course through the University of Utah Honors College. In many ways, this course was my own version of this Think Tank during fall semester, and it was a vital part of my background knowledge as I stepped into the class. Through the “Patient Experience Project”, I worked with the University of Utah and Intermountain Medical Center to develop a program to increase the number of advance directives on college aged patients’ electronic medical records.

My first exposure to the Think Tank was when I met with Dr. Kirtly Jones, as she met with me to determine if I would be a fit the Think Tank. Immediately, I was impressed with the commitment of the faculty members to making sure that the Think Tank would succeed. This has continued to be a theme throughout my experience in the class. Rarely do ten undergraduate students have the opportunity to meet for three hours each week with three world-class faculty members and community leaders. Each of the faculty members has invested their time and resources into providing opportunities for our group, and for each of us individually. For example, I was humbled and moved by my experience observing mental health court, which is presided over by Judge Judith Atherton.

This course has provided valuable opportunities to participate in meaningful group projects, thought provoking ethical discussions, and meet with passionate community leaders. I truly appreciate the caliber of students, professors, and guest speakers that have been a part of this course. My undergraduate experience at the University of Utah has been enriched by the other students in this Think Tank and the projects that we have developed, and I have been impressed and humbled by the commitment of the faculty members.

## *Alex Bennion*

The most intriguing aspect of being part of a think tank this year has been the access to vast wealth of opportunity that blossomed for our small group of students. This opportunity took on a variety of shapes. First, and most importantly, the opportunity to get to know and work with three extremely well educated, prestigious, dedicated and good spirited faculty members. Not only have they had a strong guiding presence within the classroom, but each has also taken to their strengths to offer extracurricular activities to the students. For example, Judge Atherton invited each of us to attend her proceedings over mental health court. I had never attended court before, but it was inspiring to see how Judge Atherton conducted law in such an intimate setting. Throughout the semester it has become clear that these three women care about our group and individual successes more than I would ever expect from most University professors.

A second form of opportunity that has become apparent throughout the year is based in the interest and involvement of a variety of community members. This think tank, unlike any other class I have been a part of, regularly features a community member as a part of our weekly discussion. Many distinguished professionals who currently practice in Salt Lake City including the district attorney, several doctors, lawyers, and figures in our government, as well as others have visited our class. Each visitor has offered their help to us in whatever way they could, whether it was telling a personal story or offering to review our presentations; we could not have completed this semester as successfully as we have without their help. Additionally, the unsung heroes

of our community who could not attend our weekly discussion but have offered their correspondence with think tank members via email has proven to be instrumental in our successes as well. For example, Dr. Jacob Calvert, who currently practices in California, granted me access to his research, which was used to demonstrate the tendency for medical doctors to overprescribe medications and expose the lack of data involved in the prescribing practices of doctors. Additionally, I was inspired by the willingness of Katie Ward DNP and her son Matthew to share their frank and impactful story during one of our discussions and allow us to include it in our publication.

Without the help of our three dedicated faculty members Judge Judith Atherton, JD, Margaret Battin, PhD, and Kirtly Jones MD the community and our individual contacts this academic experiment of 10 students would not have been able produce what it has.

### *Stanford Escalante*

I applied to this Think Tank with little interest in law and five years' experience in healthcare. My interest was in challenging myself to find creative ways to make business bridge the gap between law and medicine.

As the only member from the school of business, I felt a strong need to bring light to the importance of the business implications of the Think Tanks ideas. I looked passed conventional ways of solving difficult health-care vs. law problems, and tapped into my entrepreneurial spirit. In every module and every assignment, I dug deep into the root cause of the problem to determine the pain, and imagined efficient and sustainable products and services that eliminated that pain.

Challenging myself was great, but seeing problems from the multiple perspectives of the diverse students that made up our class was what made the experience truly exceptional. As a group we accomplished remarkable things, and I learned as much from each of my peers as I would from any classroom.

Our professors structured the class in a manner that gave us order and direction, but their diverse experience and ability to be effective leaders is what really made the class successful. We worked in complete autonomy and the environment was such that we could be honest and share our true opinion.

This Think Tank enhanced my overall college experience and my strengths as an individual. It challenged me to improve many of my skills like, writing and teamwork; but the most important improvement this Think Tank provided was my improvement as person. It helped me become more aware and engaged in social problems.

I am beyond grateful to have been a part of our Think Tank and excited to continue to work on our project over the next year. What I have learned could not have been learned in a traditional classroom, and the experience doesn't end with spring semester. The friendships, connections, and common interests we have gained

### *Stevenson Smith*

This think tank was an absolutely amazing experience. To begin, we had three exceptional teachers and mentors in Dr. Jones, Dr. Battin, and Judge Atherton. The mentorship I received from each of them was a once-in-a-lifetime experience, and they all brought a tremendous amount of experience and knowledge to the subjects we discussed in the think tank. Next, I was continually amazed at how hard everyone worked to achieve the goal of the think tank—work that was in many ways supererogatory and not dependent on any kind of grade, etc. This hard work and dedication was contagious, and our finished product would not have been anywhere close to where it is now without such hard work.



We began our project with a very modest aim—to put one prescription drug drop box on the University of Utah campus. This single aim grew into all that we have presented in this book, and witnessing the progress and development was absolutely incredible. Everyone brought their own strengths and interests to the table, and we were subsequently able to create three separate, substantive projects that all contributed to the in-depth goal of post-prescription management. This evolution—and achievement—only strengthens my conviction in the power of collaboration and working together the big, difficult, and looming problems of the day.

### *Yen Nguyen*

This Think Tank course not only taught me about the unavoidable tension between the fields of Law and Medicine, but also valuable lessons in project development, cooperation, and problem solving. I remember what I told Kirtly and Judy during the midterm evaluations: “I want to improve my speaking and writing abilities.” How narrow my vision was at that point. Looking back, indeed those skills were indirectly improved throughout the year as we moved through our modules, but there was much more gained.

The experiences I had over the course of this year will surely impact me as I embark upon my career and life itself. In the “Beginning of Life” module, I had the opportunity to interview a surrogate mother about her selfless decision for a friend. During the mental health unit, I heard from members of both sides of the Mental Health Court—from the participants themselves to the team that works daily to help them. Lastly, I will never look at high fructose corn syrup or performance-enhancing drugs the same. Ever.

As we moved towards choosing a project, Josh and I had one simple, achievable goal in mind: install a drug collection drop box at either the University Pharmacy or campus police station. It was easy; it was doable, but entirely underwhelming that with a team of twelve people it was all we would achieve. Through multiple frustrations over the semester, it was amazing to see the project evolve to the tripartite it is now—curriculum, law, and technology. Luckily, I was fortunate enough to be able to participate in two of those three groups.

It was a privilege to work with an extraordinary group of driven peers from diverse backgrounds as well as with phenomenal faculty who did not hesitate to push us outside of our comfort zone and still expect only the best. As I look forward to finishing my undergraduate career and pursuance of medical school, I will take these lessons of public speaking, networking, clear writing, teamwork, and knowledge of conflicting issues between law and medicine to aid me in my career.

### *Kirtly Jones MD*

The Uneasy Intersection of Law and Medicine. The title of our Think Tank left us a lot of territory to cover, and a lot of conflict and conflicting opinions to consider. However, the title of our think tank could have easily referred to a class with three “professors”: a gynecologic surgeon who practices in-vitro fertilization, a bio-ethicist, and a judge. One considered the shortest way between two points of view is the straight line that can be defined by a needle going through the middle of the problem. One considered the problem by defining it by the many tangents at the edges of the issue so that all perspectives can be judged. One considered a legal brief an “easy read” and sees the world in very practical terms. The students often were shown three very different and occasionally conflicting ways of approaching a problem.

In the beginning, the class seemed to be a group of students as different in points of view and personalities as the professors. Most students stayed the course (some didn’t) and by the end they brought their energy and creativity together to weave a tapestry of thoughts and actions into a lovely whole. The process of creating a

cohesive and productive group out of what might seem to be random particles has been the most wonderful part of teaching in the Honors College with Professor Battin over the years. In this Think Tank, the “creating” part was done by the students. It has been a privilege to watch them grow in their writing skills, their speaking skills, and their interpersonal relations with other members of the group. As a reproductive biologist, it reminds me of the undifferentiated cells of an early embryo that grow, create connections with other cells, and then differentiate into a cohesive, complex, and integrated whole. Each think tank became a different species but developed under the same processes.

I will remember the phrase “Sufficiently Satisfied Senior” as one of the creative outcomes of a team considering the question of whether suicide was always a result of mental illness. I will cherish the Big Ideas that came out of the Big Ideas Room – powerful powerpoint presentations of how we could change the world, or at least the high-fructose corn syrup part of it. I will remember the graphics, the home grown ad campaigns, and the hopeful efforts to make the world a better place for those with less.

Thank you all.

### *Judith Atherton JD*

As Peggy, Kirtly and I began to plan this think tank in early 2012 we sought a topic in an area in which we each had some expertise. As our thinking matured, we discarded the idea a mere “topic” in favor of a broader area of inquiry, ultimately choosing The Uneasy Intersection of Law and Medicine. Our strengths, medicine (Kirtly), law (Judy) and bioethics/philosophy (Peggy) lent themselves to this inquiry, but its breadth was so great that the subject and parameters of the final student project was utterly unknown. We recognized that the students would be required to “stretch” themselves by mastering fundamentals of the three disciplines, including terminology and analytical models. As important, though, was the need to develop insight into the true intersections and tensions that existed, tensions that went beyond a “doctor vs. lawyer” paradigm.

By introducing three areas of intersection- beginning of life issues, treatment of mental illness in the criminal justice system and drug abuse- we sought to explore the difficult areas of interdisciplinary contact, communication and understanding (or misunderstanding.) We hoped that our guests in class, as key players in their disciplines, would offer the students insight into the areas of intersection but also leave them with as many questions as answers. Ultimately, the goal was not to solve any particular problem but to open a dialog and promote different perspectives that could potentially change the larger conversation.

As students took control of the class in the second semester their chosen project of prescription medication disposal, initially rather limited in scope, developed into a comprehensive effort to address post-prescription management in new and creative ways. Their solutions ranged from education on the need to dispose of unused medications, about proper disposal methods and on over- prescribing practices to developing software to assist doctors and their patients in tracking medication use (or non-use) and drafting legislation for appropriate redistribution of much-needed unused medication.

In reflecting on this class year, I am amazed that at the students’ initiative, creativity and commitment to “doing something big.” Their work may result in a sustainable long term benefit to the health and safety of this community.

*Margaret Battin PhD*

Take a miscellaneous little group of students with a whole range of different majors—chemistry, music, physics, philosophy, business, and more, and start by insisting that they produce an innovative, workable, important idea—something that will continue to have an effect far beyond the time they spend in class together. Then expose them to an array of social issues where law and medicine seem to be in conflict: law thwarts medicine, or medicine makes demands outside the law. For students who had hoped to enter one or the other of these professions, the conflict may be bewildering, frustrating, acute. Continue to insist that they produce an innovative, workable, important idea, but of course you’ve upped the ante by showing many of our society’s failures to resolve such conflicts: continuing friction over reproductive issues, for example, or perverse and conflicting incentives concerning the needs of mental health and the criminal justice system, or flatly contradictory policies in the societal treatment of drugs of all sorts.

Just the same, keep on insisting that these students—still only undergraduates--produce an innovative, workable, important idea, one that will solve problems of these sorts. Even picking a topic isn’t easy; repeated sessions yield not much beyond a bunch of half-baked ideas inscribed on sticky notes, too broad to be workable, too narrow to be interesting, too idealistic to have half a chance of standing up to societal forces that would oppose it. For example, how about trying to reform the nutritional system of the public schools by banning products with high fructose corn syrup? Perhaps a great idea, but clearly unworkable, at least within the space of the nine months of the academic calendar and a tiny budget, and unrealistic in the face of immense commercial interests. By the end of the first semester, as winter closes in, there’s nothing but frustration and a sense of powerless futility in thinking about how one could contribute to resolving some of society’s problems.

What to do? The group settles on a sort of least-worst choice of the available suggestions: a project on the disposal of unused prescription drugs, in an effort to do something about Utah’s high rate of drug-related fatalities. Well, the suggestion is, let’s put a dropbox somewhere on the campus, where people can discard their unused prescriptions.

I remember an acute sense of disappointment, of being completely underwhelmed, after an entire semester’s work. A dropbox, a sort of anchored, armored mailbox, somewhere, that’s supposed to reduce prescription drug related mortality in Utah. Reduce it from among the highest in the nation. Get real. Labor, labor, and bring forth a mouse.

That was at the end of the first semester. But as the group began to face this project, it began to see why it was inadequate. What the social problem’s deeper causes are. How one might think imaginatively about them, and constructively about how to resolve them. The rest is history—that is, the impressive history of this Think Tank—in developing a multi-part way to approach the problem of prescription drug fatalities. The very notion of post-prescription management was born, and with it we had an innovative, workable, important idea—something that will continue to have an effect far beyond the time we have all spent in class together.

It’s a heady trip from deep disappointment from real optimism and elation: this is a project that will work, and well worth the year. We’ve all learned something in it, students and faculty alike.