THE SCRIBLERIAN

Spring 2018 Edition

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Argumentative- English 1010

1st Place Winner: Nicole Lewandowski, "Don't Look at that Ad!" For Professor Campbell

Advertising has been a rising issue in our society for a number of years. It has become an important topic of conversation for many people and has developed a place in the values that many individuals uphold. The population of America sees advertising as the truth, but no one is able to understand whether or not this truth is accurate. Our country has continued to worship this form of marketing for years as if advertising has the answers to living a successful and wellrounded life. The answer to living a successful, well-rounded life is to not worship advertising, but to see and understand just how harmful it can be to an individual and to America as a whole. Instead of pushing the harmful effects of advertising to the side, Americans must begin to understand just how much it has impacted our country, especially in a more negative than positive way. Since the increase of advertising in America from the 1970s, there is reason to believe that advertising has affected our world by influencing Americans to believe that happiness comes from consumerism, creating a misconception about the ideal body image, and increasing materialism.

Advertisements have created a common mindset amongst consumers that happiness comes from consumerism. From a young age, many individuals are taught to believe or understand that buying things for themselves will lead to happiness in their life. Unfortunately, this thought process is far from correct. A prime example of this can be seen in children. In an article published by Matthew Lapierre and his colleagues, research shows that "Children are often one of the most affected age groups which advertising targets, because many parents will buy their children whatever they can to make them happy, ultimately results in their children's happiness" (Lapierre). Most advertisements, along with the companies that create the advertisements, target children because they are aware that children are capable of getting what they want by simply complaining to their parents. Having the mindset that buying things to make a child happy is not the way that a parent should raise a child. As a result, most children begin to believe that what they want will get handed to them whenever they want. When parents choose to please their children by giving them whatever they want, it can often lead to the development of a harmful relationship filled with conflict between the parent and child. This harmful relationship is the result of constant consumerism.

The relationship that a parent has with their child can be directly impacted by advertising. According to Šević, "It has been found that advertising towards children from a young age increases the requests that these children have towards their parents for products on the market" (Šević 157). These requests ultimately rise from the things children see through media tactics, such as various forms of social media or television. For example, the commercials that are aired presenting the newest Lego collection becomes the only thing that a child might think about, which leads to the exclusion of their parent's voice of reason. With this voice of reason completely excluded from the mind of a child, that child could begin to idolize and listen to what is seen or presented through this media. Many children sit in front of a television for several hours a day while their parents are unaware of what their child is watching. There are all sorts of commercials and advertisements that are aired throughout the duration an individual spends their time looking through various forms of media, so the impact these media forms

play on a child's life can be drastic. Materialistic qualities are implemented in these children's minds from a young age thanks to the advertisements that are presented through media tactics. This materialism can cause further complications in a child's life and lead to an unbalanced lifestyle when that child reaches adulthood. Sometimes, children may find themselves comparing their goods to those of their peers, which can lead to dissatisfaction for some children. Most kids become jealous and envious of things they do not have, which leads to the desire to become better than the peers around them.

Advertising has led to a well-known misconception that there is an ideal body image both men and women should have. A common side effect of advertising is the increase of eating disorders it causes. Often times many individuals starve themselves for days by not eating until their body feels absolutely necessary, just so they can be the skinny body type that most people look for. This starvation does not have any positive influence on the body as it results in eating disorders such as anorexia nervosa and bulimia nervosa, two of the most common types of eating disorders our country sees. These eating disorders not only impact a person physically, but mentally and emotionally as well. The mentality of needing to be skinny or needing to be under a certain weight limit has formed from the advertisements presented to Americans through different media tactics. Nitcher presents the overall body appearance in relation to Barbie, by saying that individuals should be "5 feet 6 inches, 110 pounds, a size 5 and eats whatever she wants and never gains weight" (qtd. in Stephens 138). This description of the ideal body image is often seen as the "perfect" appearance a person should have, but this appearance is nowhere near perfect, let alone realistic. This mentality is common among both men and women, but it is more common for females. Much of the advertising that appears on social media or television targets both genders. However, it is something that females seem to struggle with more than males.

There has been an ongoing competition amongst females for many years, and while there have been more body positive messages spread throughout the media, this competition continues to be ongoing. According to Rose, "When a female reaches a social status she is content with, it is assumed that this popularity results in an overall aura filled with negativity" (qtd. in Anthony). Most of the time this negativity is the result of the advertisements that appear on television or social media platforms. With this negativity comes more competition between females. Instead of constantly worrying about who looks better, individuals should learn to embrace one another and the fact that we are all different. Advertising makes embracing one another difficult because we all expect to look the same, basically perfect, but that is not possible nor realistic. Americans have to learn to accept the fact that we are all unique in our own ways, but it is hard when there is outside influence from the advertisements that make it seem like it is easy to be perfect and have the perfect body shape.

Advertising promotes the need to constantly buy more for a deeper satisfaction, therefore increasing materialism in individuals. America has become one of the most materialistic countries in the world. There are constant technological, home, and economic advancements that our country undergoes, yet these advancements still don't meet the expectations of many individuals. As a result, there continue to be advancements that are created just to meet the satisfaction of all sorts of people, which leads to an increase in materialism. For example, when companies broadcast billboards or television ads about the new smartphone on the market, often times many individuals in our country are no longer satisfied with the same smartphone they got months prior. Advertising creates an unhealthy environment that many individuals find themselves in, consisting of constant envy, pessimism, and boastfulness. As Belk once said "At the highest levels of materialism, such possessions assume a central place in a person's life and

are believed to provide the greatest source of satisfaction and dissatisfaction" (qtd. in Sirgy). This point proves just how much advertising has increased materialism. Americans associate their happiness in life with buying things, but there is no guarantee about how long will continue to bring happiness to a person's life. Belk continues on stating that "Materialistic people are found to be individuals who appear possessive, non-generous, and envious" (qtd. in Sirgy). Materialism is not everything it seems. Often times, individuals believe that buying things will lead to lifelong satisfaction. However, there is no guarantee about the length of how long that happiness will last from consumerism. Buying things only leads to the urge that many people find themselves having, which is the urge to buy more and more all the time. When consumers buy items, it leads to temporary happiness, the key word being temporary. Consumers are happy with their new products until a new and improved version of that same product hits the market, which is the point when that product no longer has any important significance because it is not up to date with the advanced versions of the products. We no longer find any interest in the thing that once brought us the most happiness.

Although advertising has created more harm than good, there are certain aspects of advertising that are important to overall growth, as certain advertisements can be educational. Not all forms of advertising are bad, as some advertisements can be very influential in an individual's life. The benefits of advertising include awareness of advanced products on the marketplace, it provides possible employment opportunities for various companies, and overall education of consumers. Advertising can be very important and beneficial when it comes to consumerism and overall awareness, but it can still be harmful to an individual's understanding of American consumerism. There are often many important messages that certain advertisements contain, which can be an essential part of growth. An example of this can be seen in the increase of awareness about handwashing behaviors after restroom use. After a study was conducted by Adam Biran, his research showed that "50% of the citizens of India that were included in the study saw improvements in handwashing behaviors after encountering several handwashing advertisements" (Biran 285). Although this study took place in a foreign country, the results still relate to similar situations that have occurred in American culture. Even though advertising was beneficial in this scenario and other similar situations, it can still be harmful. For example, in the handwashing behavior study, no one was aware of how long handwashing habits continued after individuals encountered the advertisements that presented the information. Just because advertisements are visible to the human eye does not mean that they will be beneficial in every situation. As a society we must be aware of the messages that advertisements contain. Another example of how influential advertising can be is in relation to gambling. In a study conducted by Samantha Thomas and her associates, research proved that "Through the advertisements targeted at gamblers there was an improvement in the understanding of just how harmful gambling can actually be for an individual" (Thomas 124). There are many benefits that advertising has, like providing educational resources to consumers, providing an understanding of new products on the marketplace, and providing employment opportunities for consumers. There are few benefits, but when it comes to advertising and completely understanding advertising, one must learn that the consoutweigh the prosin an unmeasurable amount.

Advertising leads individuals to believe that happiness comes from consumerism, it increases materialism, and creates many misconceptions about the ideal body image. With advertising affecting America in these specific aspects, our country should begin to understand just how influential advertising really is, and not in a good way. Americans have started to idolize things that are not even

real since that is what is present through media tactics. The American culture that has developed in our country must learn to no longer idolize the things that advertisements present because they are not real and very unlikely to ever be real. Our country will only continue to grow, as will the consumerism aspect of America. The consumerism lifestyle in our country only leads to misfortune and an unhappy lifestyle, which is something that many Americans fail to understand. As we go on being bombarded with advertisements and all sorts of exposure to propaganda, it is important to recognize that this advertisement is more harmful than good and will only continue to harm America as our country expands.

2nd Place Winner: Tingting Gu, "These Robots Come to the Rescue After a Disaster" For Professor Laura Walker

When a disaster strikes, who is the first on the scene? "Robots," answers Robin Murphy, a world-famous disaster roboticist. "And they should be there," she emphasizes. Having worked in the field for more than 20 years, Murphy has become an excellent guru in disaster robotics, whose potential in rescue have not yet been fully realized by humans. In her Ted Talk "These Robots Come to the Rescue after a Disaster," Murphy uncovers to the general public the mystery of disaster robots: what they can do, how they can do that, and why it is important to incorporate them into rescue. By using some appeals of pathos and ethos, but primarily logos throughout her speech, this roboticist effectively informs the public of the unparalleled potential of robots in reducing losses from a disaster. "Robots," stresses Murphy, "can make a disaster go away faster."

Before going into depth with the strengths of robots in disaster relief and recovery efforts, Murphy successfully strikes her audience in the beginning with strong emotional appeals. Murphy starts her speech in a solemn tone, "Over a million people are killed each year in disasters. Two and a half million people will be permanently disabled or displaced, and the communities will take 20 to 30 years to recover and billions of economic losses." The list of startling figures falls on the audience, hitting their nerve with the dreadful destruction caused by life-changing disasters. The 9/11 World Trade Center terrorist attack is one of those mentioned by Murphy. The heaviness becomes even more overwhelming when the audience is exposed to photos of the rubble, where scattered relief workers appear rather powerless surrounded by miles of flattened buildings. Although people have long heard of the destructive force of disasters, their hearts still sink and cannot help mourning for the heavy loss when these cruel facts are put right in front of them. And this is exactly what Murphy intends to achieve. After eliciting the shock and sadness from her audience, Murphy strikes while the iron is hot by introducing the exceptional strengths of applying robots to disaster rescue—reducing initial response time and speeding post-disaster recovery. Up to now, the audience has been fully ignited to dive into the focus of this speech—disaster robots.

This passion for robots accumulates throughout the whole process and climbs to its culmination at the end of the Ted Talk. Murphy wraps up her speech by challenging her audience to look for the robots the next time they hear about a disaster, "They may be underground, they may be underwater, they may be in the sky, but they should be there. Look for the robots, because robots are coming to the rescue." With eyes turning to the promising future of robots in relieving disasters, her listeners are now empowered to embrace the robots with a willing heart to see them incorporated into the efforts of search and rescue after a disaster.

However, these strong feelings would not have been able to linger for a long time in people's mind had it not been backed up by Murphy's well-established ethos. It is her strong credibility that attaches weight to her emotionally-loaded language. Even before presenting the speech, her exceptional professional background has endowed her with the potential to convince her audience. Ranked 14 among 30 most innovative women professors alive today, Murphy pioneers the concept of disaster robotics, which qualifies her to speak on this certain topic. Yet her credibility is further strengthened in the actual process of delivering the speech. She demonstrates her expertise by using scientific terminology and describing in details the operating systems of different kinds of disaster robots. For example, she explains to the audience why the UAVs (unmanned aerial vehicles) are able to perform perfectly in strengthening geospatial and hydrological understanding of the Washington State Oso mudslide. The reason, she points out, is that "they can take only two to three days to get any other way-and at higher resolution" as long as they are fed with all required data. Her simple yet clear description makes the complex operating system of the robots more approachable to her audience. She even brings this robot onto the stage for her audience to take a closer look at. All these details perfectly reflect her consideration to those who are barely equipped with any professional knowledge about UAVs. This consideration, in turn, convinces her listeners that she is not only a knowledge scientist, but a trustworthy friend as well.

Despite the good combination of fire-like pathos and iron-like ethos in this speech, the strongest appeal comes from her logos. Like a flowing stream, her logic runs through her audience's ears and penetrates into their mind, carrying with it the capacity to leave on them a lasting impression. To bring to light the tremendous advantages of robots' faster response to disasters, Murphy demonstrates to her audience a step-by-step reasoning process: After a disaster, if robots—the initial responders—can get in, then other groups will also be able to get in to restore the infrastructure there. If the construction is underway, then probably the economy can be restored in a shorter time and made more resilient to the next disaster. Here, by presenting clearly the chain of effects set off by robots, Murphy drives home her point, "If you can reduce the initial response by one day, you can reduce the overall recovery by a thousand days, or three years." The deductively valid logic here allows her audience to see clearly the power of robots in driving away the lingering impacts after a disaster.

Besides solid reasoning, Murphy also builds her strong logos by drawing her audience's attention to real life examples. One of the examples she talks about is concerned with a Japanese tsunami, which devastated 400 miles of coastland. Yet the biggest problem left by the disaster was with the ports, the significant entrance to relief supplies. "The fishing port was told it was going to be six months before they could get a manual team of divers in, and it was going to take the divers two weeks," says Murphy. While, on the other hand, a SARbot (Search and Rescue Robot) was able to reopen that fishing port in four hours using her sonar. By pointing out the stark contrast of the working efficiency between a manual team and a robot, Murphy easily drives home the strengths of robots over their human counterparts. In the process of post-disaster recovery and reconstruction, robots can save more lives, more time, and more money than humans. This is why robots should "come to the rescue after a disaster."

This 9-minute long speech ends in loud cheers and warm applause. Presenting the whole speech is just like building a human. By choosing logos as his skeleton, ethos his muscles and pathos his heart, Murphy has successfully "created" a living man, who can speak for himself. The speech alone proves effective in displaying to us the incredible capacity of robots in rescuing lives and minimizing losses after catastrophic disasters. From the World Trade Center disaster to the Fukushima Daiichi nuclear emergency, robots go places people cannot go and do things people cannot do. We now no longer view robots as distant "strangers" only existing in fiction movies; instead, we are turning to view these machines as reliable saviors in drastic reallife situations. I believe, just as Murphy has expected, those who have watched this Ted Talk will "look for the robots" the next time they hear about a disaster, for a strong belief has been planted in their mind—that is, "Robots come to the rescue after a disaster.

Expressive- English 1010

1st Place Winner: Isabel Gomez, "Decomposing" For Professor Sarah Bates

"Childhood is measured out by sounds and smells and sights, before the dark hour of reason grows." -John Betjeman

It all happened rather quickly; one moment everything was full of colors and laughter, and then it wasn't.

I distinctly remember the first moment that really changed me. It was raining and we had all come back in from recess. The stench of wet carpet and mold rose as we lined up single file to go to class.

"Oh my gosh, Isabel! I didn't know you were pregnant!" Charlie, my friend, cackled rather ungraciously at her statement. I, of course, had no idea of the meaning behind her words. I was utterly ignorant and unaware that she was being unkind. "Look at her tummy, it's so big!" The other girls laughed and I, not knowing better, joined in. That same evening I declined to have any dessert after dinner. I was seven years old.

During my pre-teen years, I was a dragon enthusiast. Instead of going to recess, I'd stay in class and practice my flying-lizard drawing skills. One afternoon, while working on a particularly difficult sketch, a fellow classmate walked into the classroom.

"Oh damn Isabel, I thought you were a dude for a second," he feigned surprise. "Y'know, you really do look like a boy. How are you even a girl? You're too ugly."

The following afternoon I went outside for recess. I remember how windy it was, and I begged the wind to carry me away. That was the day I promised myself that no one would ever say anything like that to me again.

So I changed.

I taught myself how to put on makeup, spent an hour and a half or more exercising every day. For lunch I'd drink a bottle of gatorade and eat a small bag of baked chips. I never wore the same outfit twice. I had become an incredibly superficial person. The two things I cared about were my appearance, and how many friends I had. This attitude of mine resulted in terrible grades and caused my mother to take me out of school and enroll me in online classes for eighth grade. The worst thing about being homeschooled is that it is incredibly lonely. Although, looking back I believe that being isolated was necessary because I finally realized I'd become the type of person I had been running away from.

And then I fell.

I'd always heard people say that high school was the best time of their lives. Well, I'd like to know what the hell kind of high school they went to, because I did not have that experience. Picture this: four years of wearing khaki shorts and bright orange polos. Need I say more? Perhaps that wasn't as bad as having a crush on a guy for three years and finally going to senior prom with him... and his date. Despite the sad irony of being a third wheel, it doesn't compare to what happened beforehand. Sweat. That's the main thing I remember about my first day of high school. We were having mass that day, so we had to wear royal blue sweater vests over white long-sleeved button up shirts. Drops of sweat rolled down my back as I carried four textbooks and my lunch bag. I'd considered going to the bathroom to eat my peanut butter and jelly sandwich, but the thought of toilet water splashing onto my food changed my mind. I glanced at half-empty tables hoping to find a kind face, but was only met with averted eyes begging me to move on. Just as I was about to reconsider the bathroom option, the sweetest voice I'd ever heard said hi to me, and asked if I'd like to join her. We immediately hit it off and became inseparable for three years. Now that I think about it, she was the *best* best friend I'd ever had. Of course, all good things must come to an end, right?

During the summer before senior year, I really thought about where I was in my life. I was always hanging out with the same people, going to the same places, talking about the same things. Whenever I was around my small group of friends, I became irritable and distant, and after a while I finally figured out why.

I had changed. I wasn't the same person from freshman year, but they were. I was older, more independent, and I knew we weren't as close as we had been. For some reasons that don't seem all that complicated anymore, they stopped hanging out with me, so I found new friends. I still don't know exactly why my best friend decided to stop talking to me, but I decided not to ask after we passed each other in the hall and she acted as if I wasn't there.

Fast-forward to December of senior year, two weeks before finals. A guy—let's call him Joe— had sat with us during lunch for a while, but I'd never really payed much attention to him. I was laughing at something my friend said when he spoke.

"You have a really nice smile."

I was caught off guard. Not a single guy in my eighteen years of living on this planet had ever said anything like that to me before. Six words and I was done for.

Salt and butter filled the air as I stood awkwardly against a wall, searching the crowd. Joe was late for our first date. When he finally arrived fifteen minutes later, we walked to the ticket booth. He didn't have enough money for both of our tickets which amounted to a whopping total of twenty-eight dollars, so I paid. Once the movie had ended, we walked around the casino and found ourselves on a balcony overlooking the hotel pool. It had started to rain and I turned to go back inside, but he grabbed my arm and pulled me to him until we were mere inches apart and kissed me.

After a couple weeks, I asked if we should tell our friends that we'd been dating and he proceeded to tell me he didn't want a relationship because it would be too sad when we had to leave for college. He claimed that we should just enjoy spending time together (which consisted of making-out in the backseat of my car). As if that wasn't enough, at school he acted as if he didn't know me, and would only sit next to me at lunch if we were alone. After a couple more weeks, I'd decided to end all contact and ignore his existence. Fast-forward to prom night, a little birdie told me that Joe had spread some distasteful lies about me to some of his buddies. The birdie was my old crush.

For as long as I can remember, people are always asking who I am, or what defines me. When I look at how far I've come, I find it hard to believe that I could possibly be defined by my experiences. They are not what define us; nothing really does. I don't know who I am anymore than a stranger would, because

I'm constantly changing. I'm not who I was four years ago. Heck, I'm not even who I was a week ago. Labels given to us by others' perceptions do not determine who we are. I'm not shy. I'm not the quiet girl who hardly speaks in class. I'm not the girl who got rejected by her long-time crush, the girl that was taught to be ashamed of her body, or the girl that eats when she's sad. I'm not the girl that's never been asked out on a real date. I'm not the girl with the resting bitch face and tattoos, or the girl who wears too much black. I'm not the girl whose parents are divorced, and I'm not the girl with "daddy issues."

People are not static beings; we are unsteady, we fall, we change, and we grow. We are not supposed to take the things that have happened to us and cling to them like a life boat. It's a learning experience. I'm learning that I deserve better. I'm learning how to share my feelings and speak up. I'm learning how to fall in love with myself. I'm learning how to be by myself. I'm learning how to forgive those that have hurt me. Most importantly, I'm learning that I change with the leaves. I know that falling is inevitable, and that once I collapse I'll break, but I also know that those remnants of who I used to be will decay and nurture who I will become.

2nd Place Winner: Megan Black, "The Sun" For Professor Sarah Bates

The question "Who are you?' really irritates me. Who am I? Well it depends on the day, and time of day, that you ask me. One thing I know for certain about who I am, is that I am consistent at being inconsistent. I'm the sun, setting and rising daily. To understand what I mean when I say I am the sun, one must learn of the pattern my life follows.

This about me I know: I am a cycle of instability. Somehow this uncertainty has taught me that I am a pattern. I am a continuous course of progression and regression, light and dark. My life has been a constant routine of extreme, varying emotions. I maintain a moderation of unpredictability. I follow a season, a schedule of falling and rising. I have a sporadic schedule that follows an impossible routine. Trust me, I don't quite understand this myself. I am a confusing contradiction.

One morning, I am up at 5 a.m., energized and running on four hours of sleep. I have over fifteen things on my to do list, and nothing can stop me from getting them done. I am a productive person and I feel ready to take on the world. I am confident as I get dressed in my best. As I leave the house, I am patient and understanding when someone cuts me off on the drive to school. Walking on campus, I am hopeful with a spring in my step, optimism in my veins, and I hold my head high. I am comfortable in my skin and smile at everyone in my path. I have dreams to follow and a purpose to fulfil. During class, I am inspired as I listen to the lecture my professor offers. I am smart as I grasp the concepts of scientific methods and neurons. Later at the library, I am focused as I work tirelessly on homework. I am diligent as I study for the exam next hour. I am shining bright, nothing can stop me as I set out to light the world.

But the next morning, I can barely make out the sound of yelling directed at me to turn my alarm clock off. I am exhausted as it takes every atom in my body to sit up. I am drained as I check the clock, I slept thirteen hours straight and through all five alarms. I am indecisive as I try to choose whether to get ready for school today. I am incompetent when I realize I will have yet another tardy in class. I am disgusting as I skip showering for the third time this week. I am inadequate when I don't make it to my first and second classes for the day, and am late for my third. I am clumsy when I trip over a flat surface right after my crush waves to me. I am awkward when that popular girl in class introduces herself and we don't have much in common. I am an embarrassment when my tongue ties trying to have a mature conversation with a mentor. I am irritated and icy when I eat lunch with a group of girlfriends. My declining GPA is evidence that I am an obvious failure. I am worthless, I know I am not going anywhere in life. I can't rise today. I am dark and cold and have nothing to offer the earth.

One day, I am disciplined. I am measuring every ounce and counting every possible calorie that may enter my body. I am healthy as I don't give in to the temptation to put butter on my toast that morning. I am stubborn as my Aunt offers me everything in her fridge. I am resilient even when she offers me my favorite treat, a brownie. I am strong as I resist the urge to have just one more bite of mom's grilled chicken. I am strong as I run until red blood stains my feet. I am powerful as I exercise to the point of trembling hands. I am in control when jumping jacks, squats, and running stairs cause my knees to go out. The next day, I am the exact opposite of everything previously mentioned. I am fat as I binge on hostess donuts and my dad's chips. I am weak willed when I put ranch on my salad at lunch. I am a heathen when I ravage my cupboards, eating everything in sight. I am disappointment as take the long, shameful walk down the hall to the bathroom. I am a rebel as I put fingers down my throat and force myself to puke. I know I shouldn't be doing this, but my judgement is clouded by the desire, no the need, to obtain perfection. My fingers have memorized the feel of the toilet bowl and my nose is all too familiar with the smells of partly digested junk food. I am destructive as I interfere with my body's natural digestive process. Water is involuntarily gathering in the corners of my eyes and my throat is on fire.

One evening, I am enthusiastic when my cousin shares exciting news about her love life. I am funny as I make my peer laugh hard with stupid jokes. I am outgoing when I approach new people and make friends. I am humble when I apologize for interrupting the conversation when I got too excited. I am independent when I go to the doctor's office without my mom. I am gifted as the blank piece of paper comes to life with words that tell a story. I am thoughtful when I do the dishes without being asked. I am responsible as I get to my job early and work my hardest. I am honest when I tell my mom I had a good day and did good things. I am considerate when I hold the door open for the boy carrying textbooks. I am caring when I give my struggling friend advice and support over the phone. I am spiritual when I share my insights during a religious class. I am personable when I make conversation with other girls at that night's church activity. I am compassionate when I offer consoling and reassuring words in a written letter addressed to a loved one. I am forgiving when I choose to love my dad after he just belittled me yet again. I am faithful when I pray before bed even though I am impossibly tired. I am a light, giving and feeling warmth.

The next evening, I am unreliable as I try to give my shift away for work. I am shy and timid as the hottest guy in school tries to get to know me. I am negative and grumpy when I actually arrive to the shift I almost didn't come to. I am lazy as I skip the gym but my bones ache and my muscles are sore anyways. I am silent as my favorite song plays on car ride home. I am selfish as I drive past the girl I know from church walking in the rain. I am rude as I ignore my mom when she tries to ask me about my day. Today, I was distant, covered by the clouds of depression.

One night, a stream of hot tears stream down my face and slip into my mouth. I am broken as the salt greets my tongue like an old familiar friend. Everything in my body becomes heavy. Gravity pulls me down until the emotions practically knock me down. My knees have memorized the feel of my bedroom carpet. I don't have the strength to even lift the weight of my head. I am a beggar as pleadings of my heart rush out of my mouth in a jumbled mess. The flood of feelings soils my shirt and blur my vision as I try to look upwards. I am a performer as I sing a song only God will hear. Time stands still, or does it fly by? I'm not sure, I'm lost in conversation. I am helpless as I beg for relief and I am hopeless as I express my anguish. I utter an amen then crawl back to my only earthly comfort; my bed. As I rest my head on the pillow, I and close my irritated, red eyes, I am defeated. As I drift off to sleep, I am a dreamer and hope God lets me die in my sleep.

The next night when my knees hit the ground, I am elated. This is an entirely different experience. I feel so positive that gravity doesn't have any effect on me like the last time. In fact, I feel like if I don't make a conscious effort, I will float straight up to the pearly gates where I could hug God myself and offer him praises face to face. Grief is a foreign word, all I know is gratitude. I am thankful as words of love flow off my tongue. Love for family, love for God, love for life.

Some days, I am a complete jumbled variation of the previous days. I am always having intense mood swings. Laughing one minute, crying the next. On these chaotic days, I'm extremely irritable and my thoughts are in overdrive. I am puzzled as my mind wars with who I am. I am confused, I don't know what defines me and what does not. I do not know if I am wimpy or courageous when I decide to go to the movies after an anxiety attack. Am I needy or am I mature when I decide to schedule a therapy appointment? Am I superficial or am I sincere when I tell my brother I love him after complaining that he is a complete jerk? Am I conceited or am I simply accepting when I feel good in my outfit for the day? Am I prideful or humble when I want to believe the compliment a buddy lends me? I am unclear if I'm a kind and sweet daughter, or an ungrateful snot.

Now I of course would never just tell someone I was the sun. I wouldn't ever share such delicate information with most people. If someone were to ask me who I was, I would smile and tell them what they want to hear; the general, redundant facts. I am from small town Blanding Utah, I have three older brothers and I'm currently studying Psychology at SUU. I would most likely tell them that I love cats, ice cream, and the outdoors. I am a girl with plain grey eyes, dirty freckles, uneven dimples, and dull brown hair. These things about me are all true, but they are not me. The things that make us who we are, are often never shared out loud. There is nothing unique in the fact that I was on student council, or that I played tennis in high school. The basis of who I am and my personality lye in the situations and feelings I've had and am yet experiencing daily.

So, who am I? I am just an ordinary girl, trying to combat an extraordinary disease; Bipolar Disorder. Through God, I am a trying, and moving forward. I am constantly evolving. I am burning with all the energy I have, to find and give light. I reflect whatever season of life I'm in. I am the sun, surely to set, but promised to rise.

Argumentative- English 2010

1st Place Winner: Andrew Hatch, "Stem Cells: Our Need to Know More" For Dr. Bryce Christensen

Throughout the whole of human history, new technologies have faced skepticism and reluctance from society at large. Although such occurrences can indeed be quite frustrating for the discoverers of said technologies, this reluctance is by and large a blessing. It prevents humanity from "jumping the gun" and wandering too quickly down unexplored paths that may lead to dangerous circumstances. When a new technology is embraced too hastily, without stopping to consider the possible consequences from all sides, we may come too late to the realization that the price of our nearsightedness is higher than we would like to pay.

A field in which this caution is direly needed is that of stem-cell therapy. Stem-cell research has become a very controversial issue since scientists were first able to harvest stem cells from a human embryo in 1998. Due to the relatively short amount of time that has passed since this discovery, many scientists have expressed trepidation at the pace at which stem-cell trials are progressing. One such scientist, Adil Shamoo, a bioethicist who works for the University of Maryland, believes that stem-cell trials are progressing far too quickly. He states, "Stem-cell science is just too early. We're ploughing ahead like blind people" (qtd. in Scott). Dr. Shamoo makes a compelling point that simply not enough time has passed to gain a thorough understanding of stem cells. While the possible uses of stem cells are almost limitless and the benefits they could potentially provide are extensive, we are not currently prepared to handle the associated risks. Scientists need to curtail research regarding embryonic stem cells and more meticulously explore alternatives to embryonic stem cells before society will view this promising field of medicine as a viable treatment option.

Gene therapy, another field very similar to stem-cell therapy, provides a cautionary tale of the consequences that come when one lacks the proper foresight and carefulness. In the 1990s, gene therapy was seen by many to be the future of medicine. It afforded hope to Jesse Gelsinger, a young man from Tucson, Arizona. He was born with a rare metabolic disease called ornithine transcarbamylase (OTC) deficiency, which he managed with a plethora of medications and a low-protein diet (Stolberg). In 1999, at the age of 18, he volunteered for a gene therapy study at the University of Pennsylvania to explore the effects of a new treatment for babies born with the same disease. Gene therapy was a new and relatively untested field of medicine; the excitement of the possibilities allowed the geneticists involved to become careless and overconfident. Dr. W. French Anderson, who conducted the first gene therapy session in September 1990, said, "We had got ourselves hyped up, thinking there would be rapid, quick, easy, early cures" (qtd. in Stolberg). Sadly, despite the marvels of modern medicine, such miraculous outcomes rarely occur. Thorough study, effective treatment, and the passage of time are typically required to achieve a happy outcome.

This study is a clear example of what happens when sound investigative principles are forgotten in favor of short-sighted and irresponsible treatment options. Three doctors were at the helm of the study that Jesse took part in, and their objective was to inject cells that contained a healthy OTC gene into the patients to replace the unhealthy ones. They administered an adenovirus to Jesse that had been modified to suppress the virus and act as a carrier of the OTC gene. Jesse began to experience severe

complications almost immediately, and four days later, he succumbed to the effects and passed away. The doctors were devastated. They wondered what they could have done differently; what had gone wrong? However, their regrets came too late for a young 18-year-old boy. A careful investigation found that the scientists had ignored warning signs that the procedure could cause serious complications. It was also discovered that Jesse had a liver condition that should have precluded his involvement in the study in the first place. After this tragic trial, the FDA halted all gene-therapy studies, deciding that the risk was too great and geneticists did not know enough about the subject to continue with clinical trials. Today, gene therapy has not resulted in the miraculous treatments that were envisioned by many in the early 1990s. Anyone who carefully examines the issue can observe that this botched study had an incredibly negative effect on the field of gene therapy. It created a huge trust deficit in the public's opinion of the field, and the lack of progress in the time since can be directly attributed to this unfortunate incident.

This doleful example shows a stark reality: Carelessness in medicine can have drastic and life-altering consequences for patients, doctors, and scientists alike. Sadly, we cannot change the past; the parents of Jesse Gelsinger cannot get their son back. Nevertheless, to quote the famous George Santayana, "Those who do not remember the past are doomed to repeat it" (qtd. in Flamm). Stem cell researchers will be able to avoid a similar fate only if they learn from the mistakes which have been made previously and exhibit caution and mindfulness in their studies.

A conscientious discussion exploring all sides of this issue is key to preventing such mournful mistakes in stem-cell therapy. To be a capable participant in the discussion, a basic comprehension of what stem cells are and how they operate is essential. Each cell in the body has a specific function. For example, a blood cell is designed to transport oxygen throughout the body. A brain cell, or neuron, is designed to transmit chemical and electrical signals to other parts of the body. Each specialized cell was, at some point in the developmental process, derived from a stem cell through a process called differentiation, which is how stem cells become specialized to perform a specific function in the body (Allman 16). Stem cells differ from normal cells in that they have not yet become specialized. However, they possess the capability to do so if it becomes necessary to replace damaged cells due to disease or injury. Additionally, stem cells possess the capability to divide and reproduce almost indefinitely ("Stem-Cell Basics" 1). This ability ensures that the number of stem cells within a person's body will remain relatively constant.

In order to gain a greater understanding of the difference between stem cells and other cells, one might consider the following comparison. Children in elementary school are frequently told that they can do anything they set their minds to. Whether they long to be a schoolteacher, lawyer, or astronaut, children have the potential to work in any occupation they choose. One might say that they have not yet become "specialized" until they choose a career and begin to work towards it. However, the further they progress in their chosen career path, the more difficult it becomes to then switch to something else. For instance, a third-year law student will have a much more difficult time switching careers to become a doctor than a first-year undergraduate student. A law student could do this, but it would require substantial effort to change specializations.

Something very similar occurs with stem cells. The stem cells found in a new embryo, known as human embryonic stem cells (hESCs), are classified as pluripotent, meaning that they can differentiate into any of the specialized cells found in the body (12). More mature stem cells, however—found in the bodies of

adults and called somatic stem cells—can only differentiate into a certain number of specialized cells based on their location within the body. For example, a stem cell found in bone marrow might differentiate into a blood cell but would not normally become a neuron ("Stem-Cell Basics" 10).

While scientists have been able to learn quite a lot about stem cells, there is still much that remains a mystery. In 1998, only a short twenty years ago, scientists successfully developed for the first time a process used to harvest hESCs from a human embryo and keep the cells growing in a laboratory. hESCs are taken from an embryo within the first 3 to 5 days of development, when the embryo—called a blastocyst—contains only about 200 cells (Phillips). This discovery created shockwaves throughout the scientific community. Many excitedly thought of the possibilities of stem-cell therapy: cures to cancer, diabetes, Alzheimer's, heart disease, and more. However, as the experience of Jesse Gelsinger shows, that excitement—if not kept in check—can have devastating unintended consequences. The scientific community has a long road to follow before such treatments will become a reality, and we must take care not to get ahead of ourselves.

The discovery of hESCs was the result of conscientious effort, strict dedication, and painstaking experiments on the part of the scientists involved. They were only able to develop the process of extracting hESCs after years of scrupulous attention to detail in testing hypotheses. But finally, they succeeded in isolating the stem cells from the embryo. The most difficult part of this procedure was the task of keeping the cells alive and growing after they had been extracted from the blastocyst. Once scientists have removed the cells from the embryo, they are placed in a petri dish holding a "broth" of sorts—called a culture medium—that consists of nutrients necessary for the cells to flourish ("Stem-Cell Basics" 5). This solution mimics the effects of the amniotic fluid that sustains a baby in a mother's womb. In addition, scientists alter embryonic cells from mice so that they no longer divide, then place them at the bottom of the dish. These cells are called a "feeder layer" (5). Additional nutrients are discharged into the medium from these mouse cells, and the hESCs latch onto these feeder cells and thus are held in place within the dish. In recent years, however, the process has improved and it is no longer necessary to use a feeder layer of mouse cells. Although the procedure itself has advanced, many opponents of stem cell research protest the objective for which it is performed: namely, the extraction of embryonic stem cells.

While many celebrated this discovery as groundbreaking and revolutionary, many others watched on in horror. The process used to retrieve the hESCs from the blastocyst resulted in its destruction. The embryos utilized for this research were created through in-vitro fertilization and no longer wanted by the parents; however, those who believe that life begins at conception decried this scientific breakthrough as something akin to murder ("The Stem-Cell Debate"). For this reason, many are fundamentally opposed to embryonic stem cell research, regardless of any potential future benefit to the human race. While those at the far end of the spectrum on either side are firm in their beliefs, as happens with most issues, the majority of people lie somewhere in the middle. As Mr. Yuval Levin acknowledges, most people recognize the potential benefits of embryonic stem cell research while simultaneously perceiving the complex moral concerns that surround the issue. Mr. Levin poses the question, "Given the ethical questions at stake, is the scientific promise sufficient to make us put the ethical concerns aside and support the research?" (qtd. in "The Case Against") This is the question that must be answered to find a resolution to this controversy. Are the potentially revolutionary discoveries that could result from stem-cell research worth violating society's long-held moral and ethical

standards? Humanity does not yet have enough information to provide an adequate answer to this question.

An additional aspect of embryonic stem-cell therapy that presents a problem is the potential for immune-system rejection. Since hESCs are taken from an embryo and not the patient's own body, stem cells are frequently attacked as foreign tissue by the immune system once inserted into the body (Langwith 27). Currently, the most common preventive treatment for this occurrence is to administer immunosuppressive drugs. The problem with doing this, however, is that it leaves the patient extremely vulnerable to even the most innocuous disease (Murnaghan). A mild cold could prove fatal while the immune system is suppressed in this way. Moreover, if a patient were to receive embryonic stem-cell therapy to treat a disease, that individual would have to keep taking these immunosuppressive medications for the rest of his or her life. This is one of the most persuasive reasons why we should inquire into alternatives to using embryonic stem cells.

As these examples have demonstrated, the use of hESCs is a complex, multi-faceted and highly debated issue, with both ethical and technical controversies. For this reason, scientists have begun to explore other options. One of the most promising has to do with reverting somatic stem cells back to a pluripotent state. The first experiments done to probe this possibility consisted of a process called somatic-cell nuclear transfer (SCNT), in which the nucleus is removed from an embryonic stem cell and replaced with the nucleus from a somatic cell (Goldthwaite). However, this process presents several deficiencies. Firstly, since it requires the use of an embryonic stem cell, it does not alleviate the ethical and moral concerns of those opposed to embryonic stem-cell research. Secondly, many times these procedures result in "hybrid" cells—part embryonic stem cell and part somatic—that cannot fulfill the functions of either type (Goldthwaite). These scientists knew they were onto something, but they had not yet delved deeply enough to find a plausible solution.

However, that changed in 2007, when scientists were able to successfully revert somatic cells to a pluripotent state ("Stem Cell Basics" 13). These cells are referred to as induced pluripotent stem cells (iPSCs). Scientists at Kyoto University in Japan introduced certain proteins to somatic cells which caused them to gain the characteristics of pluripotent stem cells. These findings have provided the first step towards a solution that will hopefully resolve the ethical debate on stem cells, after more study and research.

There are still many aspects of stem-cell development and function that remain unknown. One example of this is the process of cell differentiation. Scientists know that stem cells differentiate by switching genes on and off but remain unsure what triggers this process to begin with or how exactly it is accomplished ("Stem-Cell Basics" 14). In spite of so many unknown factors, researchers have been able to learn quite a bit about this process. Differentiation takes place in several phases, with the cells becoming more and more specialized at each step. To return to an earlier example, these phases would be similar to a student going through elementary, middle, and high school, and so on. Each stage of the process is initiated by different internal and external cues. The cell's DNA controls the internal cues for differentiation, and the external cues come through interaction with other cells (4). Branching into other fields of stemcell research would allow scientists to gain a greater understanding of this mechanism and its pertaining signals, and thereby better understand the mutations that lead to cancer and other abnormalities of cell division. A scientist might even discover a cure for cancer or other horrendous

diseases. Reducing research on embryonic stem cells and delving more deeply into alternatives, such as iPSCs, increases the likelihood of such a hopeful outcome.

The important innovations which led to the creation of iPSCs have presented a solution to many of the concerns had about embryonic stem cells. For starters, since a patient's own adult stem cells can be used to create iPSCs, the risk of immune system rejection is largely eliminated by their use ("Stem-Cell Basics" 13). In addition, somatic cells taken from individuals with diseases, such as Parkinson's, Lou Gehrig's disease, or Alzheimer's, can be made into iPSCs and used in studies to discover cures to these diseases (Goldthwaite). Scientists can compare the unhealthy cells to normal, healthy iPSCs to help determine what factors play a role in the contraction of these diseases. They can also be used to test the effects of new medications without actually administering the medications to sick patients. In short, iPSCs show great promise as a future medical treatment, both to aid in developmental research and for use in the treatment of disease. These cells offer much of the same potential as embryonic stem cells, while eliminating much of the controversy.

The discovery of iPSCs offers a promising glimpse of a resolution to this debate, but iPSCs do not come without some drawbacks of their own. One of the most drastic is that the current replication methods of iPSCs are incredibly inefficient. A mere 1% of the adult cells used become iPSCs (Goldthwaite). This occurrence has prompted some to question how similar iPSCs really are to hESCs. While they appear identical in terms of structure, iPSCs are much less predictable and reliable when differentiating into specialized cells than hESCs. To take a case in point, biologists at a company called Advance Cell Technology conducted an experiment in 2010 to compare iPSC and hESC cell lines. They found that both types of cells differentiated, but iPSCs did so at a greatly reduced rate and many more of the cells died (Hendricks). Although scientists are very optimistic that these results will improve as better differentiation techniques are developed, the reality is that iPSCs have not yet become as efficient as hESCs. Nonetheless, as iPSCs are subject to more thorough research, it is very likely that this rate of efficiency will be raised significantly as a result of greater knowledge and improved experimentation.

In spite of these challenges with efficiency, the potential benefits that iPSCs could provide after more research far outweigh the costs. The controversy surrounding hESCs has caused many to recoil from stem-cell therapy; however, we cannot even begin to imagine how stem cells could revolutionize medicine and illuminate our understanding of the developmental process. As we continue to move forward with meticulous research of iPSCs, the path before us will become more and more clear. For now, however, we need not remain in the dark. We can expand our exploration of embryonic stem-cell alternatives and achieve miraculous results, if we are willing to put in the time and effort to do it right.

Hesitation in the face of new technology can be a blessing. However, if the technology is found to be good and beneficial, we should embrace it and allow it to improve our lives. Inventions such as the telephone, computer, automobile, and light bulb were mocked relentlessly and predicted to fail, but each withstood the doubtful expressions of skeptics, and time has proven them to be solid, reliable breakthroughs in technology. As humanity is willing to press forward, slowly but surely, with stem-cell research, we will find that, like these other inventions that have revolutionized the world, stem cells can offer the human race amazing progress that we have never before seen.

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2nd Place Winner: Alicia Zufelt, "Driverless Cars: A New Technology: For Dr. Bryce Christensen

Each year, nearly 1.3 million people die in road crashes. That's an average of 3,287 deaths per day ("Annual Global Road Crash Statistics"). 81% of these fatalities from road crashes are due to human error alone ("How Do Self-Driving Cars Actually Work?"). What if there was a way to completely eliminate these human errors, significantly reducing fatalities by car crash? Autonomous vehicles are the answer. These are cars that are computerized to make sure the passengers inside get to their destination in the safest, most efficient way possible. Driverless cars are an up and coming technology, which engineers predict could be a part of public consumerism by 2020 ("How Do Self-Driving Cars Actually Work?"). This advancement will revolutionize the way our roadways work. While there are many cautions that come along with such an advancement of technology, the benefits of autonomous cars far outweigh the possible cons. Autonomous cars will minimize error, create quicker commutes, make rides safer for passengers, and make it so anyone can own a car, no license required.

An autonomous vehicle is equipped with multiple computers which are designed specifically to sense the surroundings of the vehicle, to predict the fastest routes, and to even predict other drivers' or cars' actions. Designers have programmed the cars to recognize what certain road signs mean, what to do when traffic lights change color, what it means when a biker is signaling a left turn, and how to react when a car has flashing blue and red lights on top of it. The vehicles are able to do this through the use of cameras and laser-based detection: LIDAR, which stands for light detection and ranging. LIDAR uses invisible lasers on all sides of the vehicle to sense both where it is on the road and where other vehicles or objects are on the road ("How Do Self-Driving Cars Actually Work?"). An autonomous vehicle can sense not only where other cars and people are in the moment, but can also predict what actions they are going to take. Take for instance, a pedestrian standing on the side of a busy highway. It is uncertain what the pedestrian's intentions are. Is he going to stand and wait for the road to clear before crossing, or is he going to run out in front of the car? Humans are nefariously terrible multitaskers, and while driving a busy highway, trying to pay attention to what the other cars surrounding a person are doing often leaves a pedestrian unnoticed to a human driver. Chris Urmson, head of Google's driverless car program, says that because the car is able to sense everything that is going on around the vehicle one hundred percent of the time, it will be able to detect the pedestrian and slow down with a reaction time much quicker than a human driver, in order to prevent an accident from occurring (Urmson).

On top of laser detection, autonomous vehicles are also equipped with high-end GPS systems, which are used to select the safest and most efficient routes, as well as inertial measurement unit sensors, or IMU, which are used to pinpoint the exact location to a quarter of an inch. ("How Do Self-Driving Cars Actually Work?"). All a person has to do is jump in the car, enter the place he wants to go into the GPS, and hit start. The car does the rest. The passenger doesn't need to pay attention to the road around him, so this time spent commuting can be used to catch up on work, to read a book or enjoy some TV, to text his friends, or even take a nap. He could even be completely drunk and still be able to operate the car, eliminating the chance of accidents and fatalities due to driving under the influence. The possibilities are endless; autonomous cars are revolutionary to productiveness and safety.

Despite all of these amazing technological advancements, there is still a chance of a malfunction occurring in these vehicles. While computers may malfunction at times, humans are far more likely to make mistakes. These mistakes are due to distraction from the road by either a cellphone, another passenger in the car, or even a driver glancing in another direction for a split second. An autonomous car is designed to be able to pay attention to multiple things at once, enabling it to be aware of what is happening on the road around them one hundred percent of the time. On top of being easily distracted, human drivers can also make mistakes due to their emotional state. Traffic has been known to cause a rise in blood pressure, creating the anxiety we know as "road rage" which can cause impulsive and dangerous decisions to be made on the road, all because "that jerk cut me off!" Computers, much like the ones in autonomous cars, are incapable of emotion. Eliminating human drivers not only eliminates human error in this case, but will also increase our health, as rising blood pressure can cause cardiovascular health issues.

Human distraction and mistakes in driving cost thousands their lives each year during car wrecks. The elimination of human drivers means the elimination of human error. Fully autonomous cars are constantly aware of everything going on around them, unlike humans who are only able to focus on one or two things at a time. Distracted driving is the leading cause of car crashes. Self-driving cars could save 30,000 lives per year in just the US alone (Tettamanti 248). In fact, a study published by researchers Scholettle and Sivak in 2015 about crashes involving robotic cars found that "self-driving cars were not faulty in any crashes they were involved in. Furthermore, the overall severity of crash-related injuries has been significantly lower for autonomous vehicles than for conventional cars." (Tettamanti 249).

Autonomous cars would increase not only road safety, but also road efficiency. Speed limits are put into place to account for human error. If human error is no longer an issue, then speed limits can be raised. People will be able to get to their destinations much more quickly, all while being able to focus their attention on things other than the road, increasing productivity.

Efficiency would also be increased through car-to-car communication. Autonomous cars are programmed to communicate with one another, in a way that humans can't. Car-to-car communication allows the car to use radar or ultrasound to broadcast its position, speed, steering-wheel position, and such to cars within about nine hundred feet (Knight). This data sent out is used to enhance the driving abilities of the other autonomous cars on the road, giving even more detail as to what is going on, and making predictions even more accurate. This communication will also reduce congestion on highways, because the cars use the data they receive from other cars to help pick the most optimal routes to get to their destinations. This will reduce fuel consumption and emissions, creating a healthier, less polluted planet.

Another way driverless technology would increase efficiency is through their benefit to everyone in society, specifically the elderly and people with certain disabilities who are not allowed to operate conventional vehicles, due to both physical and mental restrictions. An autonomous vehicle needs no licensed operator. Everyone would be able to "drive" a fully autonomous vehicle, as no actual driving is required. This would increase not only the mobility of our elderly and disabled community, but also their independence and their confidence in themselves (Johnson 33).

Imagine being a person with restricted ability in today's day and age. Everyone is constantly out and about and busy all day. Often, the people who can't get themselves around on their own don't get the social interaction they need as humans. Picture what it would be like to sit at home all day, all alone,

waiting for someone to visit, or to even just come by and say hello. The elderly and disabled are completely dependent on those around them to get them to the places they need to go. This takes a huge toll on their self-esteem, as part of our basic needs as humans is to feel confident and capable in our abilities. In fact, the generation of older adults has some of the highest rates of loneliness, depression, and even suicide (Newman). If they were able to have their own cars, where all they needed to do was press "go", their social interaction would dramatically increase, as well as their levels of personal happiness and autonomy, improving an essential part of their lives. Autonomous cars will create not only a safer, more efficient world, but also a happier, more inclusive-to-everyone world.

As wonderful as these benefits sound, there are still some who oppose this technological advancement. Much like other technologies, autonomous cars come with their concerns. Many people worry about malfunction. Like all technology, autonomous cars run the risk of malfunctioning and perhaps even causing the deaths they were designed to prevent. What happens when someone who has never learned to drive a car (because they never needed to) finds themselves in an emergency situation where the car is not operating the way it was designed to do? This is an extremely controversial subject that comes up while discussing the future of autonomous cars. Along with malfunction, computers also run the risk of being hacked. Could a hacker take over an autonomous vehicle, potentially re-programming it with malicious intent? (Tettamanti 247). These precautions must be taken into account, but we must also remember that driverless technology is still under research and experimentation. While engineers don't yet have all the answers as to how to fix the possibilities of malfunction and hacking, they will continue to work on and improve their models, minimizing the chance of error, or perhaps creating a back-up plan in order to keep passengers safe. The designers assure consumers that the cars will not be on the roads for the public's use until those bugs are completely worked out.

Another common concern people have with this technology is the possible loss of jobs. How will they affect our economy? But perhaps instead of a sudden loss of jobs, it is rather a gradual change of jobs. The advancement of driverless technology is slow and isn't going to hit the markets all at once. As driverless technology becomes more popular, taxi, bus, and truck drivers, would be replaced with human moderators: people who send cars out to pick people up, much like an "Uber", just without the human operator. Even when autonomous cars do become part of public consumerism, not everyone is going to want to use them at first. The transition to driverless technology will be gradual. Hence, so will the loss of jobs. (Tettamanti 248). But, even with the loss of jobs such as the "pizza delivery guy", driverless technology comes with the extreme increase of demand for other jobs such as hi-tech machine experts, software developers, and wireless network engineers. Our economy will remain the same, as long as people prepare for a change in job demand.

The most common fear people share about driverless technology is that we are becoming too reliant on technology, and that one day the technology will backfire on us. After all, "machines (are known to) share the fallibility of their makers" (Carr 154). We reiterate this fear again and again through the stories will tell, such as robots designed to help humans somehow become able to develop their own agendas. These fears are nothing new to humankind. Stories like these stem from peoples' fear of the unknown. People have always feared what they can't explain, or don't fully understand. This is a survival instinct: stay away from the unknown, there is a possibility of danger.

Fear is a survival mechanism. It is simple psychology. The brain senses unknown situations or strange experiences and warns us to be aware of our surroundings, as something around us may cause us harm.

This is why when new technologies are introduced people tend to reject them, especially if it is a lot of change all at once (people have a fear of change as well). This comes from our deeply rooted fear of engulfment. Reuven Bar-Levav, M.D., identities this fear as one of three basic types of fears that all people experience (the others are abandonment and non-being). As humans, we want to be in complete control of ourselves and our actions. This is why driverless technology is rejected by many. Because of this fear of being overcome or controlled, people tend to be wary of new technologies. After all, "to be a little weak, vulnerable, welcoming, or friendly is to expose oneself to the danger of being taken over" (Bar-Levav 41). While it is definitely wise to be cautious when exploring new technologies, there is no need to worry about it taking over; that fear is nothing but a slippery-slope fallacy perpetuated by Hollywood's dystopian stories. Even if an autonomous car makes a mistake, that does not automatically mean they will continue to make worse and worse mistakes. Engineers will only improve driverless cars' abilities to keep us safe. The survival instinct of fear is there to protect us from harm, but that does not mean it is always correct. Often times, the sense of dread we experience is for no reason at all (Bar-Levav 51). Sometimes pushing that fear aside and taking a risk is worthwhile, especially when the benefits, such as the ones that come with autonomous cars, will do so much good for society.

Another concern with driverless technology is the question of ethics. Who takes responsibility when there is a crash? While computers are significantly more predictable and less flawed than humans, it is still possible for an autonomous car to be involved and at fault in an accident. Who do we blame? The human in the car? Or the vehicle manufacturer? (Tettamanti 247). This issue is still being hotly debated as this technology is being developed.

Recently in Arizona, a woman, Elaine Herzberg, was struck and killed by an autonomous car being tested by Uber. There was an emergency backup driver behind the wheel, but the driver was unable to take control of the vehicle in time and a life was lost (Wakabayashi). This is a terrible tragedy that would cause many to regard driverless technology as too dangerous for public use. While nothing will ever be able to bring this woman's life back, by continuing with the improvement of driverless technology, we can still save the lives of the 1.3 million people killed each year in road crashes due to human error. Driverless technology is still in the testing stage, and Elaine Herzberg's death is a reminder that engineers still have a lot of work to do before these vehicles can be deemed completely safe.

In other cases where autonomous vehicles were involved in crashes, it has been found that the autonomous cars are almost never at fault. In March of 2017, an Uber self-driving car crashed with another vehicle in Tempe, Arizona. After extensive research, it was discovered that the other driver, the human driver, was at fault. The same was discovered while researching a crash where a man in a Tesla car on "autopilot" mode died after colliding with a tractor traveling perpendicular to him. Researchers found no defects in the system that would have caused the accident (Wakabayashi). Even when driverless cars are involved in crashes, the fault still almost always lies with human error, which would be completely removed if every car on the road was fully autonomous.

Even if every car on the road were autonomous, the public still has concerns about the possible event of a crash, however unlikely it is. In the possible event of a crash, autonomous cars are programmed to prevent the fatalities of the most amount of people, even if that means sacrificing the life of one. What justifies killing? The car can be programmed to save lives in the result of an accident, but how do we choose which lives to program it to save? Similarly, engineers must decide how an autonomous car will react in the event of a crash. Will it turn one way to avoid killing the passengers on one side, but end up

killing the passengers on the other side? Will it be designed to save the youngest passengers first? (Santoni 421). This question of ethics can make one think of the common moral dilemma of the train tracks: a train is barreling out of control toward 3 people tied to the tracks. A person standing by the tracks doesn't have enough time to untie them, but does have enough time to pull the lever to switch which track the train will continue on, avoiding the death of the three, but in the process, killing one person who is tied to the other track. Is the killing of one or a few justified if it saves the majority? This issue cannot be ignored while discussing autonomous cars, and often sparks debate in discussion. While we have not yet found an answer, engineers are developing the solution of ethics along side the development of the actual technology.

Ethics will always be a controversy with autonomous cars. There will always be a question as to who is responsible when it comes to death or severe injury. As long as engineers continue to improve driverless technology and work out all the bugs before public release as they have promised, the questions of ethics will be few, as there will be few to no accidents occurring.

Our world is becoming more and more complex each day, with so much technological advancement and novel ideas. It is only a matter of time before fully autonomous cars become the new norm. While being fully reliant on this technology may seem unnerving, cars are already far more autonomous than they were when they were first introduced in the late 19th century. Take for instance gear shifting. Most modern cars automatically shift gears as we increase the speed. This was not part of the original model. People were wary of that technology when it was new just as they are wary of completely driverless technology today. As time has progressed, cars have become more and more autonomous. A common feature that has been added to cars recently is automatic braking. In 2017, Tesla, Mercedes-Benz, Volvo, and Toyota had automatic braking installed in over half of their vehicles (Edgerton 1). Other cars have been equipped with collision alerts: the car is equipped to notice when a collision is about to occur that the driver is blinded to, and alert the driver with beeping and buzzing to slow down or stop in order to avoid it. Cars aren't fully autonomous just yet, and they aren't suddenly going to be fully autonomous for everybody. The transition will be slow as the technology is tested and improved.

This transition to autonomous technology may seem a little unnerving to some at first. And while most of the concerns people have are understandable, the benefits of this technology far outweigh the risks. The mistakes of human drivers are costing thousands their lives each year. Driverless technology makes it so human error is no longer a factor. Humans are unpredictable, but technology will do what it is designed to do. People will still be wary as technology advances, but we also need to be aware that sometimes our fears are incorrect; not everything new will end up being dangerous. Autonomous cars are an all-inclusive, safe, and efficient method of travel. They will improve the lives of billions of people as they are introduced to society.

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Expressive- English 2010

1st Place Winner: Launa Wilson, "Everyday Science" For Dr. Bryce Christensen

Many students who dislike going to school base their disdain off of the idea that the knowledge taught in school does not apply to 'real life'. Throughout my high school career, I heard fellow classmates tell teachers that they would never need to know how to analyze a shakespearean tragedy or balance chemical equations in their future career as a professional athlete. Although I understood where they were coming from, I still believed that what we were learning in class, especially in the area of science, was useful in our everyday lives. As an example, one of my hobbies includes baking. I am nowhere near a professional in the area; my skills are only sufficient enough to satisfy my family's cookie cravings. However, I have found that even in my amateur baking endeavors I use my basic knowledge of the scientific method and chemistry to improve the treats I make. Baking is just one example of a real-life application of science, and others can be easy to name with a little creativity. It is important for these applications to be noticed by students because understanding science is essential to navigating the world and being a productive member of society.

Author Eugenie Laverne Mitchell coined the phrase, "The world is a classroom." If that's the case, then I would say claiming the kitchen as my laboratory is appropriate. As I have channeled my inner mad scientist, using pots and pans in place of test tubes and Erlenmeyer flasks, I have discovered how the scientific method works in real life. In its simplest form, the first step of the scientific method is to ask a question. In my case, the question was "How can I make these chocolate chip muffins more moist?" The next step is to formulate a hypothesis, which is typically organized as an if/then statement. In an effort to improve my muffin recipe, I recalled that my mom's coffee cake recipe was very moist, and that it called for sour cream in the batter. So, my hypothesis could be expressed as the following: If I add a cup of sour cream to the muffin recipe, then I will be the creator of the best chocolate chip muffins in the history of muffins. The last three steps of the scientific method are to perform the experiment, collect the data, and then draw conclusions. Using your family members as the guinea pigs for your experiment is optional. I vividly remember the excitement I felt as I pulled these muffins out of the oven; the smell was almost intoxicating. I let them cool and then allowed my brother the privilege of being the first one to partake of my masterpiece.

Unfortunately, the feedback on the quality of my muffins was somewhat underwhelming. Never one to sugar coat things, my brother informed me that the muffin was disgusting. When I asked what he meant, he replied by dropping the muffin on the floor. It landed with a thud comparable to that of a small boulder; in other words, the muffins were hard as a rock! I sat there rather dejectedly and pondered how this culinary catastrophe could have occured. Suddenly, I recalled a lesson about the structure of lipids that we had recently been taught in chemistry. I realized that between the melted butter and sour cream, the muffins were overloaded with fats (a form of lipids) causing them to become about as dense as lead. At first, I was rather depressed about my failure as a muffin maker, but at some point I realized that I had just had a first-hand experience with science in my everyday life. From that moment on, I began to pay closer attention in all of my science classes, with the hopes of making more connections between the lectures and my own life.

As illustrated by my major muffin mistake, scientific intellectual explorations can happen anywhere and anytime. In his essay entitled "The Amateur Scientist", theoretical physicist and nobel prize winner Richard Feynman describes a few of his unusual interactions with science as a youth. He describes his beginning explorations in his laboratory not as "important experiments" but as "play" (Feynman). Later in the essay, Feynman describes a spontaneous experiment with ants in which he wanted to see for himself how ants communicate with one another to find food. Throughout his paper, Feynman makes it clear that science needn't be forever associated with large, difficult words and intimidating experiences; rather it can be something "amateurish" in which you learn for yourself something that "everybody knows the answer, but [you don't] know the answer" (Feynman). If science was consistently presented in a way in which students were encouraged to be curious and explorative, as in my own example and in Richard Feynman's essay, students might begin to see science as more than another class with homework. Instead, science could become something creative and imaginative that students enjoy participating in.

Planet earth operates on fundamental principles of science, and these laws of science are basically inescapable. I believe that it is the educational system's job to convey this message to students. For example, a surface level study of anatomy can reveal to students how our organ systems function together to create a living, breathing, sometimes intelligent human being. A basic biology class, if taught well, can increase our desire to stop deforestation because we learn that without trees, the whole ecosystem can crash and burn. One fundamental scientific principle is that humans have a higher sense of reasoning and logic than any other animal. Because of this, humans have unique likes and dislikes, as well as vastly differing opinions. So, you may be asking, why is it important to change the opinion of the general student population that science is boring? An article published by the Journal of Baltic Science Education points out that people use science "in order to understand and adapt to the environment in which he/she lives" regardless of age (Sener). Furthermore, the article claims that the skills learned by youth enrolled in science classes will "enable [them] to produce solutions by applying the information they acquire to new situations" (Sener). Thus, as students become more educated about science, they will begin to develop skill sets such as problem solving and creative thinking. Clearly, an education in science goes beyond knowing how to calculate the velocity of a sled going down a hill; rather, this sort of education allows students to be more successful in all areas of life.

After discovering why a scientific education is so important, the next step is to learn how to make the knowledge seem more applicable to students. A study in the United Kingdom observed what happened in the classroom after teachers were trained in and then implemented "enquiry-based learning" (Byrne). Children ages five to seven participated in experiments such as exploring shadows and investigating magnets. As the teachers learned to be less controlling, the students were able to overcome obstacles on their own. The study concludes that this style of learning resulted in a "consequential benefit to their learning" (Byrne). In addition to being beneficial to young children, an article published by the University of Michigan argues that the applicability of science is also important to college students. The article recognizes that "the perception of science as boring is a major issue for teachers at all instructional levels", but with the right approach this issue can be overcome (Wolter). Although a variety of methods could be employed in order to make science seem more applicable, this article found notable success in "multimedia, case-based approaches" as a way "to develop interest and perceptions of relevance in an introductory biology class" (Wolter). Overall, the investigation of these two articles show that even

though it may require more effort on the part of the instructor, creative approaches to teaching science results in great benefits to the student.

In sum, science is around us everywhere, every day. It affects every part of our lives, from muffin making to dealing with the insects that we are forced to share a space with. Although the current consensus of of most students might be that science is boring and inapplicable, this idea can be changed with a little extra effort from teachers as well as an open-minded attitude from students. As students become more excited about their personal scientific education, they will be able to better navigate the world around them. And in the end, that's all most students are asking from their education: a chance to succeed in 'real life'.

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2nd Place Winner: Malena Taylor, "Hindsight is 20/20: They Smashed My Glasses so I Could See" For Dr. Julia combs

I sat in the back of the room, slumped down as far as the chair would allow me, trying to hide the best I could, but to no avail. The crumpled-up papers full of hate began flying my way. The chewed-up gum and small metal objects came next. Sometimes they would fly past me, but too often too much, they would strike me, my body a target for their cruel games. The physical pain wasn't the worst part. The fact that they were all joining in on the hate directed towards me wasn't the worst part. The teacher never protecting me wasn't the worst part. The worst part was that I was being consumed by an immense amount hurt, both physically and emotionally, and could not show, in any form, my hurt. To do so would only intensify and increase their horrific actions towards me. It was as if my pain begged them to increase the torment. And further, I was never validated in my pain, but worse, perpetually invalidated. Not just for the pain and abuse I endured, but for being alive.

Just when I thought I couldn't get smaller and it couldn't get worse, they started their game of using my face as a dart board; sharpening their pencils and aiming them at my face. Today was different from the others. Today one stuck. I don't know how I survived the pain of that moment. From the actual physical pain of pulling the pencil out of my cheek, to the instant pain as the blood leaked from the hole left, to the emotional pain of watching the bullies high five and celebrate in their glory of torture. I wanted to die. A ten-year-old should never want to die. Tears swelled in my eyes and I flew: out of the classroom, down the hall, and as far away from that school as I could get.

The next time, they smashed my glasses. This time, the teacher shamed me and sent me into the hall. This time I left and never went back. This time would be the beginning of my esearch into the unknown. Into the world of mystery, religion, spirituality, the many great philosophies of this world, and into myself. I never fit in, because I was never interested in worldly things; in the things that would have made me "socially-acceptable." Although it took a long and painful path for me to understand, they did me a favor, by helping me see who I really was. And although it was a painful way to learn, one that I would never wish on anyone, it cut out the delusions and distractions of this world, and showed me the truth. The truth of this world, the truth beyond this world, and most importantly, the truth about myself. The truth that they didn't smash my glasses because they were horrible people but that they smashed my glasses so that I could see.

Expressive- General Education 2000

1st Place Winner: Alexis Randall, "Allure" For Professor Natalie Johansen

"Allure was her name, but they called her dangerous. Besides her infamous annual murder, Allure has allegedly killed three FBI agents. Chief Rob Justice called me in about two weeks ago to investigate Allure. During that time, I felt and seen myself change. Except, I'm okay with the change. Frankly, I've accepted it as who I am now. Getting this, Doctor?"

He paused his notes for a moment and looked at me with beady eyes. He seemed uncomfortable in his own office. His notepad was crinkled from sweat, and tapped the pen in the corner repeatedly, creating an inky snowstorm. He continued to stare at me. A big man with few words. I took that as a cue to keep talking.

"I'd like to point out that I'm a good person. I truly believe everyone is born good - until the world turns them evil. My parents raised me well, this isn't their fault. It's nobody's fault, really. Here, let me explain.

"Justice, the department's chief, warned me about the things Allure had done to past agents, but I assured him I would not fall to the same fate. Killing was Allure's forte, mind you, but I swear I never expected what that cunning killer did to me. After consulting with people close to the case, I began my fieldwork. I decided to take a different route than the other agents. I went undercover. I have to say, it was some of the most fun field work I have ever done. Actually, I'm still undercover right now. I'd like to thank you for your time today and fitting me in your schedule." The doctor nodded, adding a small hmm at the end. He blew air out of his nose in a gush, and his gray nose hairs moved like seaweed in a current. He cleared his throat, the sound of chunky phlegm made the hairs of my arms stand up. I found him absolutely repulsive. Greasy, even, like he hadn't showered for days. I refused to shake his hand in greeting on account of his ragged fingernails and uneven nail beds. Even the room was dusty. The small lines of sunlight highlighted the particles in the air like sparkling gold dust in a miner's pan.

"I'm going to go on a tangent. May I?" I ignored him and kept going without any cue from the lump of a person across from me, "Love is not an unusual part of the job, I've had a few one night stands with art thieves and bank robbers." I leaned forward to whisper the next part, "It's a good thing this is all confidential or Chief would have my head." I leaned back in my chair, and the leather creaked. I hated that noise. "Not that I was the only agent to do such a thing. You see, there's nothing like the thrill of playing with the enemy. I think they feel the same way. Ah, don't make that face, I promise it was all consensual. Anyway, I had a point to this. The point being: this wasn't love. I became obsessed with Allure the way a child obsesses over a new puppy or doll. I became her stalker, one that I would normally be hired to track down. There were many times I could have caught her, but I waited, and I think Allure knew that. It was a game of cat and mouse, but the cat slowly realized he didn't want to go for the kill. I admired the craftsmanship of Allure's kills, the beauty of them. Soon, I staged a run-in with Allure. It was at a bar. Her favorite bar, the Red Barron. We talked."

"And?" he croaked.

"And I asked to go along on one of her jobs. You see, what the police force doesn't know is most of her kills are hires. So I went along on one that was requested by a man. That's all I knew at the time."

The doctor shifted in his seat, and the leather squeaked again. It made me angry.

"We took a cab. She killed the driver even though he wasn't the target. Truthfully, I think she was trying to show off. She pulled a baby carriage out of the trunk and handed me a lump of blankets. We were the perfect image of a loving family out for a Sunday stroll." My throat was dry, and I stood up to get a cup of water from the water cooler. The water cups provided were those stupid snow cone cups, where the point of the cone slowly became soggy and just one touch caused the contents to run down your arm. I didn't drink it all. When I returned to my seat, I shifted my weight in a way so the leather wouldn't squeak.

"Now, this story isn't explicitly important. I'm just telling it to show you."

"Show me what?" He had stopped writing and now played with his glasses, leaving heavy fingerprints on the lenses. Disgusting.

"You'll see," I responded. "We finally arrived at the target's house, a yellow-paneled house with a red door. Red was my favorite color, but I found the house repulsive. What happened next was an elegant ballet performance. The target opened the door, and Allure stepped in. She twisted herself around the body and slipped a needle in the spine. But then something happened that neither of us expected. The target danced with her. It was difficult to keep track of who was who and what was happening. A blur of limbs and a thunderstorm of blows. By the end of the performance, Allure had been beaten.

"I see your anticipation, Doctor. Don't worry, I'll make it fast.

"I was surprised when the target didn't kill Allure nor I right away. They certainly could have but asked a question instead. Allure answered it, and he began telling his own story. It was a twisty story, full of romance, friendship, betrayal, greed. A real bestseller. Then came the money, the real money being offered to us. The price had too many zeros for my brain to process. Then, there was a job. Allure accepted, and we hailed another cab," I finished and paused for dramatic effect, of course.

He reached for my file resting on the gray metal desk. Before he could grasp it, I slipped it out from under his hands and thrust my foot out to stop him from advancing. He sat back down. The chair squeaked for the third time in the past half hour. I cringed and looked at the clock. I still had ten minutes left in my session. Perfect.

I opened my tan file. They were like the files from all the old cop shows I watched as a kid. The file was dusty, not surprising. There was a headshot. I was smiling in the picture. The rest of the file was useless. I ripped the file in half and set it back on his desk.

"That job changed me. I felt the heavy rush of adrenaline when we knocked on the red door. I liked when Allure praised my efforts, and I liked when Allure gave me my own assignment. I felt more useful with her than I did in the workforce. I finally belonged somewhere.

"Anyway that's besides the point. Doctor, I think you know where I'm going with this. The man who opened the door told us about a doctor who prescribed the wrong medication to someone, someone close to him. His wife, more specifically. Long story short, the doctor had an affair with the woman and when she threatened to expose the affair, the doctor killed her, and the only one who knew was the husband. But the doctor knew he would lose everything if he was found out, no, so he hired Allure to take care of it. But money makes the world go round so here we are. The tables have turned. We have been hired to avenge the man. You killed that woman, Doctor, and you would kill anyone who could ruin you. Did you do it on purpose? Actually, that's not important. What's important are the zeros on the check in my pocket. I'm sorry," I concluded before I stood up.

Strike one was when rat man attempted to run. The strike two was quite possibly the most idiotic thing the man could have done. Under his desk tucked in the corner was a gun, and the bugger pulled it out on me. Vile human beings, doctors are. He sneezed and the gun bobbed. I was extremely bothered by his sneeze. It was incredibly inconsiderate for the doctor to make light of the situation by sneezing.

I cleared my throat, "Well, here we are; you holding a gun and me already picturing how to kill you with it. I was hoping I could use something less conventional, but I guess this will do."

I left the cold office coated in warm liquid, but Allure was ready with dark towels to clean myself with. Later, as I was scrubbing brown crusties from under my fingernails, I watched the television, and I was pleased when my smiling photo was plastered on the screen. I smiled at the thought of how proud Allure would be.

A few days later, that smile reached the television again. My funeral was bleak, no friends from the force, no family. No tombstone. Only her. I guess I should've known that I was wrong; she was the cat, I was the mouse, and I had been caught.