

THE CHRONICLE

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THE SCIENCE OF

CHANGE



CONTENTS

the Chronicle

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Letters to the Editor

Letters must be within one typewritten page and signed to be considered for publication. Letters that address issues or concerns of the campus community are encouraged, but the letters column is not a place to air personal grievances against another individual. The Chronicle reserves the right to edit submissions for space, content or libel. Submit via email to chronicle@noctrl.edu or through campus mail, CM 192.

On the Cover

Illustration and back cover by Kyle Novak

physics

page 4

chemistry

page 7

covalent bonds

page 10

What's happening at NCC?

Dyson Dog Days

March 1
 ResRec
 12-2 p.m.

Stress Relief Night

March 11
 Upper WAC
 7-9 p.m.

Pancake Dinner

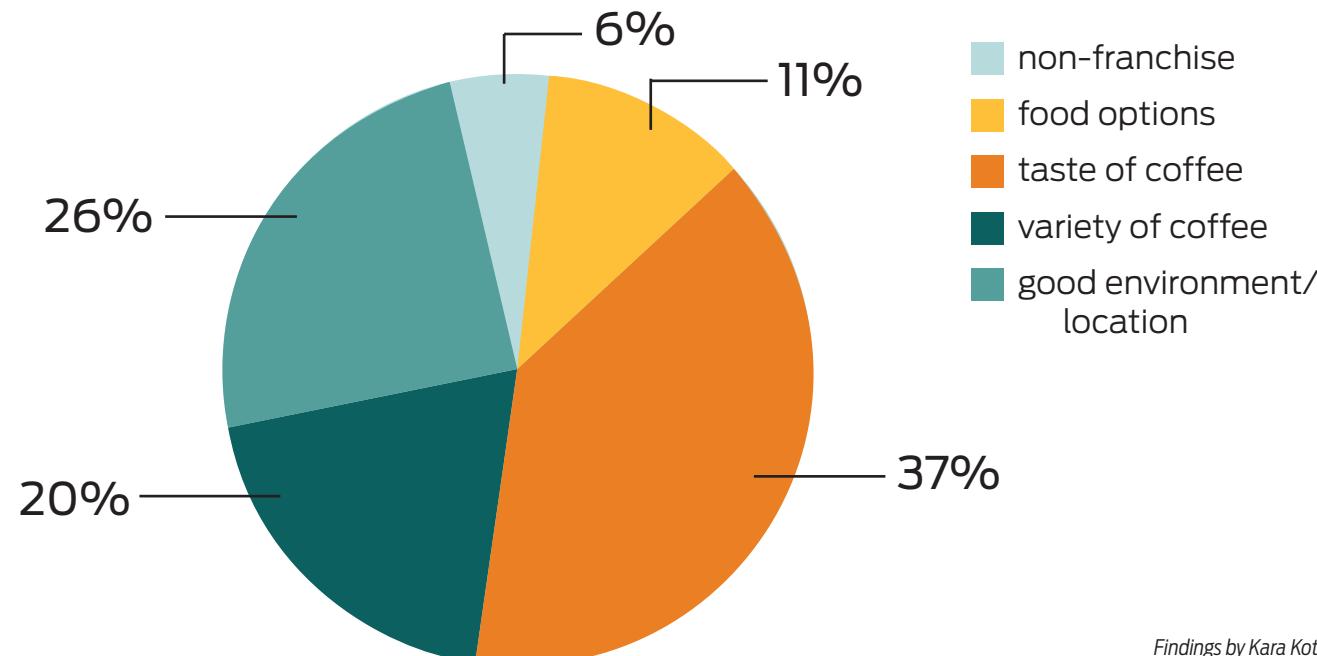
March 12
 Kauffman Dining Hall
 11 p.m.

Finals Week

March 13-15
 Good luck, students!

The science behind a good coffee shop

In a survey of 35 North Central students, the following results were collected regarding the most important factors when looking for a coffee shop.





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Friday, March 10 (events begin at 10 a.m.)

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Saturday, March 11 (events begin at 10 a.m.)

Triple jump, shot put, high jump, heptathlon and finals for running events

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physics

The science behind the new science center

Caleb Lundquist
Assistant News Editor

In 2015 it caused the demolition of homes and a dormitory along Loomis Street. Last year it brought thunderous construction to a campus once filled with the soft sounds of suburbia. Now, North Central's new science center is bringing you...delicious Au Bon Pain? Along with a slew of other features and innovations, yes indeed.

Rumors of a new science center have been circulating for a while now, with each incoming class eventually questioning whether they'll be around to witness, and take advantage of, the new facility. But when did all this talk begin? Dean of the College of Arts and Sciences, Stephen Caliendo, has the answer.

"Around three years ago, right after President Hammond came," said Caliendo. "When he was hired, an important part of what we expected was to get this facility built; it wasn't too long after he arrived that plans began to develop."

Though the project became a reality under President Troy Hammond, Caliendo mentioned how his predecessor, President Hal Wilde, was aware of the necessity for a new science center. As Wilde's retirement approached, it became clear that this wasn't a project he was going to be able to get underway. Nevertheless, the seed was clearly planted, and under President Hammond, began to grow.

Since its undertaking, one of the biggest inquiries about the science center has been cost. The sheer size and design alone would make any student or faculty member wonder about the price tag. Among involved faculty, the range seems to be \$60 million, with fluctuation depending development and unforeseen costs. With such a high number, the college had to take a different financial approach.

"It is true that we took out a loan to help pay for construction of the science center, but that's not uncommon for colleges to do, and not new for North Central," said Caliendo.

Not uncommon indeed, though the move from planning to construction was premature by the college's tradition. Historically, North Central's trustees have been rather frugal with finances; a commonly mentioned "standard" required 90 percent of funding prior to any physical development being pursued. With the new science center that standard was not met, but according to Jeffrey Bjorklund, professor of chemistry at NCC, there were additional factors at play.

"With this building there was a sense of need, and with science buildings there is a unique expense you don't see with others," said Bjorklund. "They are more expensive than other academic buildings, so the typical rate you may raise money may not meet costs, as they are constantly rising; in five years you may raise a certain amount, but now the overall cost has risen."

Now, having jumped the gun, new concerns arise: Will the college be able to pay off the loans? Is there enough money? How will this affect use of the center? To Bjorklund, while the concerns are present, they are not looming.

"I'm very confident in the development offices and the trustees; they've never bitten off more than they could deal with, and I don't think they've stretched beyond their reach with this building."

Having learned the history and dispelled the worries, one question remains: what is new about the new science center? Besides the highly anticipated Au Bon Pain restaurant, from which students can expect soup and sandwich choices similar to Panera Bread, the center promises to bring state-of-the-art equipment, increased classroom and laboratory size, and unique work spaces. For some, like junior John Kreckman, the simple size difference is enough.

"I'm most excited about the size of the building in general," said Kreckman. "Kroehler is functional but it definitely needs to be updated."

The sheer size of the center does do more than instill awe, and as Kreckman said, is worth getting excited about. Though technically the new "science" center, the building will accommodate beyond the students and faculty of traditional sciences such as biology, chemistry, and physics. Professor Jonathan Visick, head of the biology department, commented on this expected accommodation.

"The new center will allow us to bring together all the sciences and related subjects under one roof, increasing collaboration and interdisciplinary work," said Visick.

Indeed, the new science center will serve as a home base for almost any field of study related to science, including psychology, computer science, and even mathematics, to name a few. Now, for those with a firm understanding of campus layout, a new question may be forming in your heads: if those departments move, what will happen to the building they're in? For that matter, what's happening to Kroehler, the current science center? Change appears to be trickling down from this new science center, and in fact, that is the plan.

The official name is Project Dominoes, and per-

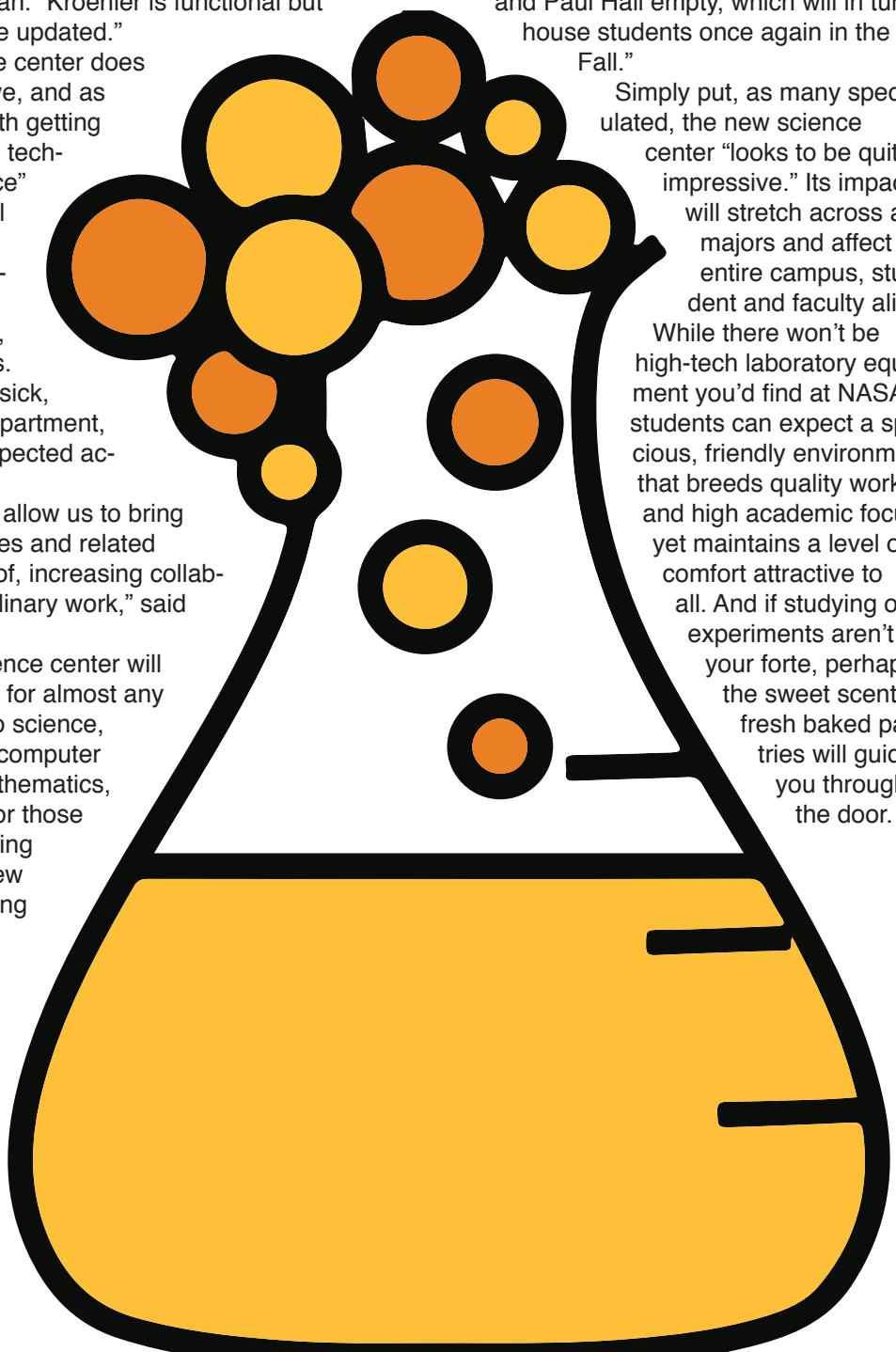
Professor Caliendo, can be summarized the following way:

"The science center is the first element in Project Dominoes. This Spring Break, mathematics, computer science and psychology will move into the new building, leaving Goldsbohn empty. Goldsbohn is going to house College of Arts and Science, political science, philosophy and communication and media studies. Once those moves are made, the entirety of the theatre department will move into Pfeiffer. Over the summer, biology, chemistry and physics will leave Kroehler, which will undergo renovations itself, and the college of business and entrepreneurship will move into a newly designed

Kroehler center. That will leave Saints Peter and Paul Hall empty, which will in turn house students once again in the Fall."

Simply put, as many speculated, the new science center "looks to be quite impressive." Its impact will stretch across all majors and affect the entire campus, student and faculty alike.

While there won't be high-tech laboratory equipment you'd find at NASA, students can expect a spacious, friendly environment that breeds quality work and high academic focus, yet maintains a level of comfort attractive to all. And if studying or experiments aren't your forte, perhaps the sweet scent of fresh baked pastries will guide you through the door.



The science behind swearing

Madeline Klepec

Staff Writer

Swearing has become a part of almost everyone's vocabulary. We do it when we're happy, sad and angry. It has both positive and negative connotations. However, have you ever sat down and thought about the science behind swearing? What provokes us to swear and are there any benefits to having the mouth of a sailor? Science says there are, in fact.

I grew up in an Irish/Italian household, so I am well-versed in the art of swearing. Never once have I thought about the context of swearing until now. So where does this urge to swear come from?

"Swearing is actually controlled by the limbic system, the part of the brain involved with the emotions," said John Bonazzo, writer with Observer website.

There is actually a part of the brain that provokes you to swear. Swearing helps us convey emotions. It lets us say what we're really feeling. And isn't that what we should be doing anyway?

Interestingly enough, The Independent website states "there are many hidden benefits to swearing, which can be used to express emotion, as a tool for persuasion, as a means of coping with pain, as a way of identifying dementia and, believe it or not, to be polite."

Swearing has proven to be more than just vulgar language your grandmother shakes her head at.

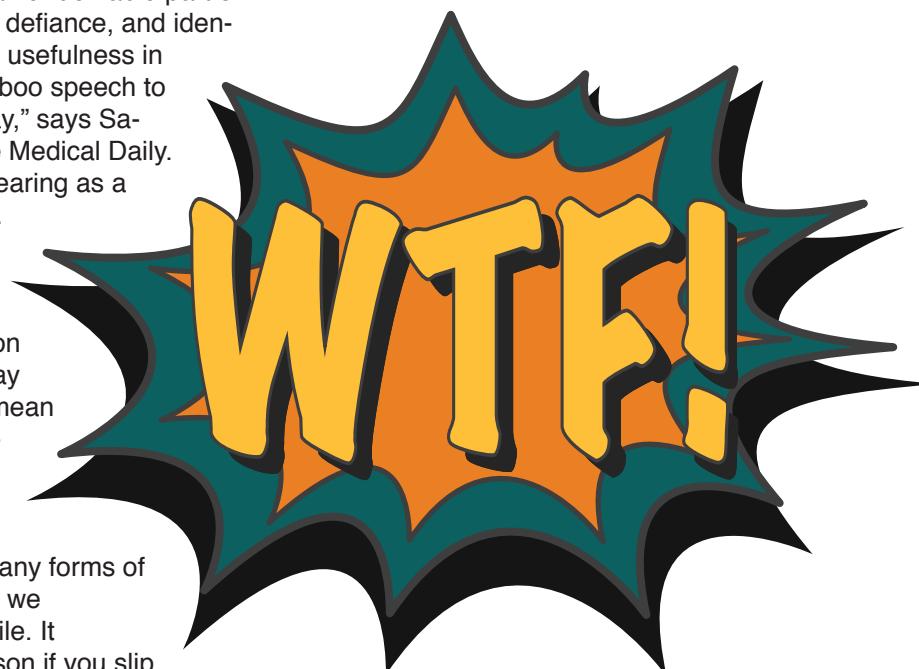
It is actually healthy to let swear words slip every once in a while. So the next time your grandma scolds you for your mouth, just tell her swearing is healthy. We swear to convey our messages; it's an effective tool of communication.

"Expletives have become an undeniable part of how we create camaraderie, defiance, and identify with others. Its emotional usefulness in relieving pain has allowed taboo speech to weave itself into our everyday," says Samantha Olson of the website Medical Daily. Yes, we can actually use swearing as a way to bond with our friends.

I'm sure we've cussed with our friends about that person who cheated on them or whatever the situation may be. It's a part of everyday vocabulary, and it does not mean someone lacks class or education. Merely, it means we are humans.

Swearing, much like not swearing, is simply one of many forms of communication. Let's face it, we all swear every once in a while. It doesn't make you a bad person if you slip a four letter word every once in a

while. Just know that swearing is not appropriate in every situation. For example, it may not be beneficial to swear in front of a boss or professor. In short, swear at your own risk.



Graphic by Rosalia LoPresti

The science behind the jump shot

Logan Ivy

Contributing Writer

Michael Jordan, Ray Allen, Reggie Miller and other professional basketball players have perfected the jump shot. Feet set, step into it and knock it down.

The science behind the jump shot is being broken down. A jump shot is either worth two or three points. Two if the shot is made within the three-point arch. Three points if made beyond the three-point arch.

Many jump shots have been made throughout NBA history. Kyle Korver has an NBA season record of shooting 53 percent from behind the three-point line. So how can one get this good at making a jump shot?

Dave Hopla shooting coach for NBA superstar Ray Allen says, "The most important part of the shot is having your shooting elbow in the letter 'L,' according to Stack Magazine.

To break down the picture perfect jump, Bleacher Reports Dylan Murphy analyzes Klay Thompson from the Golden State Warriors. First, his gather. The gather is crucial because it's the start to every shooter getting a shot off. The gather is between the catch and the release, some players rotate the ball to line up their shot, and others bring the ball down to a point of comfort before driving it back up vertically. Thompson, does all this like any other shooter, but he separates himself apart with his ability to execute these motions in a fraction of the time.

What Murphy examines next is Thompson's balance. "Balance is tough. Most shots in the NBA are contested; there is a defender with a hand

up trying to block it or make it more difficult to shoot. Tradition away, his upper body must contort backward in the same proportion as his lower body leans forward. The hips are an axis, but the body never bends at the hip. Everything moves together."

Murphy explains a mindful follow-through last. Following through with your jump shot is taught to you when you first shoot a basketball. Murphy elaborates more on the final addition to Thompson's jumper "A natural extension of the previous point: minimal follow-through. It hammers home the point that the shooter does not short-arm the ball."

There are definitely many steps to be focused on and practiced to be a great jump shooter. Work on the gather, balance, and follow through and maybe you will shoot just like an NBA star too.

Ray Allen said, "When people say God blessed me with a beautiful jump shot, it really pisses me off. I tell those people, 'Don't undermine the work I've put in every day.' Not some days. Every day."



Graphic by Rosalia LoPresti



chemistry

The science behind getting wasted

Halle Olson
News Editor

Getting drunk is fun, right? Wednesday night, during my time across the pond, I got drunk... and by drunk I mean so drunk that I'm on the verge of blacking out and throwing up. Two bottles of wine and a screwdriver later, I had mass amounts of poison in my body that turned into the worst hangover. Getting drunk is fun... until it's not.

As college students, getting drunk is typically thought to be part of our weekend plans, and for some, it is. But how do you even get drunk and why does your body react this way to alcohol? BBC says that "your body sees alcohol as a poison. It can't store it, so (it) wants to break it down and get rid of it." The liver uses enzymes to break down the alcohol into acetaldehyde (the chemical cause of your Sunday morning hangover) and from there that breaks down into body-friendly acetic acid. But when you consume too much alcohol, your body is unable to break it down quickly, leading to a

lowering of inhibitions and maybe some puking later as your body tries to force the excess alcohol out.

And there's a reason you see more girls throwing up at parties than guys. Dr. Nancy Peterson, a chemistry professor at North Central, noted that women have less of

the enzyme needed to break down alcohol into acetaldehyde and then into acetic acid. Guys, on the other hand, have much more of this enzyme, meaning they can drink more (and usually do) before seeing major effects.

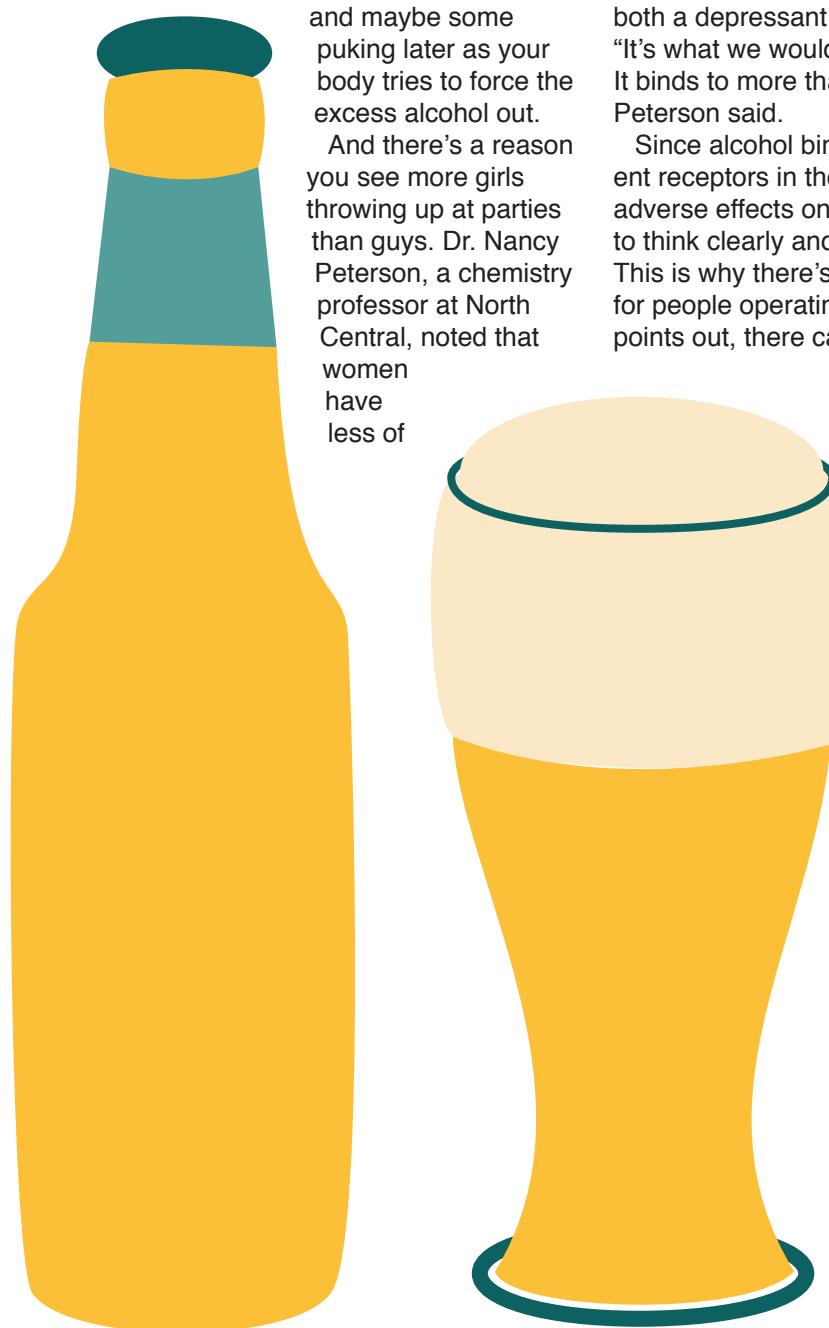
And if you didn't already know, alcohol is a drug. A legal drug, but still a drug.

Anthony Dekker said in *Scientific American* that they "have learned... that alcohol is a sedative-hypnotic in the acute intoxication phase for most patients." Peterson also said something similar in terms of alcohol's effects as both a depressant and a euphoric drug. "It's what we would call a 'dirty drug.' It binds to more than one (receptor)," Peterson said.

Since alcohol binds to several different receptors in the brain, it has obvious adverse effects on people's abilities to think clearly and behave normally. This is why there's a legal limit of .08 for people operating a vehicle. As BBC points out, there can never be zero tolerance because

everyday products we use contain alcohol, although not in large enough amounts for us to feel any effects from them. But once you do start drinking you may start to feel more open to sharing, think you're a great dancer or even that you're suddenly great in bed.

"I refer you to 'brewer's droop,' the age-old nickname for temporary erectile dysfunction induced by alcohol," said Sally Adams of the *Guardian*. Sorry, guys, you may think that you're much better in bed when you've been drinking, but science says you're not. While alcohol can be linked to "heightened sexual response... and loosening of sexual inhibitions," Adams points out that those lowering inhibitions can lead to "risky sexual behaviors,



Graphics by Vicky Jordan

If you did happen to get pregnant one drunken night, Peterson wants to warn against the danger of fetal alcohol syndrome. "It's a hugely devastating disease," she said.

It happens when mothers consume alcohol during "critical times" during pregnancy, and it can have both physical and mental effects.

So, if it's considered a drug and can lead to possibly risky behaviors and disease, why is this drug legal? Peterson thinks it's because alcohol is historical. "We've been drinking forever, and perhaps it's one of the things that got us through the Middle Ages because when you drank alcohol, then the fact that the water was contaminated with bacteria, you didn't get sick because the alcohol kills the bacteria in the drinks," Peterson said.

The science behind nailing an interview

Stella Fanega
Arts Editor

Applying for internships and jobs is not an easy task, let alone going through the required interviews.

If you're a college student waiting to hear back from the internships or jobs you applied for or you're reading the, "Thank you for your interest," letter, you start beating yourself up for not getting the offer and instead of trying again, you start doubting. You question yourself: "How is he/she better than me? What do they have that I don't? Did he/she get lucky?"

In order to nail an interview, one must understand the science behind an interview.

Getting a job correlates to how your brain works. According to a study by the Institute of Heartmath, our DNA alters with the thoughts we are consistently having. One reason why some people "always get the job" is because they have understood what is called, "the art of changing the thoughts," which teaches us how to develop our intellect and how we present ourselves in interviews.

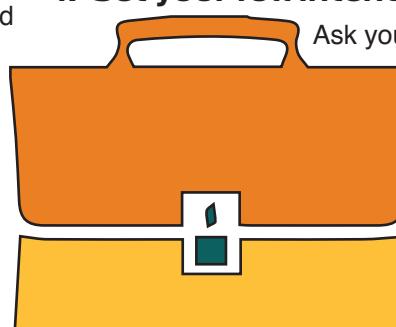
Naiana Miranda, chief bar raiser at The Bar, said that the more you practice the better you get. Miranda also explained that not many people understand what is going on in the brain during an interview process.

"Brain plasticity—also known as neuroplasticity, is the brain's ability to reorganize itself for forming new neural connections," said Miranda. "It is chang-

ing and adapting moment by moment everyday by how we direct our thinking."

In order to nail internship and job interviews, it is critical to understand how the interview process works. By doing so one should learn how to master their thoughts when being interviewed. According to Miranda, there are three main factors that should be considered by interviewees prior to their interviews.

1. Set your full intention:



Ask yourself this question: what is the purpose for going to the interview? The obvious answer to that is you want the job. However, the more you understand why you want the job, you are more likely to act on it. Moreover, you will gain more determination to making sure that you get the job that you want.

In terms of neuroplasticity, Miranda believes that when your intent is clear, your brain starts firing signals, sending out the message of what your intent is. In addition, our thoughts and intentions can alter the structure and the way our brains function.

2. Focus on what you want:

The second step is focusing your attention to making it happen, which is landing the internship/job you applied for. According to Miranda, imagine yourself acting with self-confidence and certainty that you will end up getting the position you applied for.

In the sense of neuroplasticity, the more you focus on the possibility of getting the position, the more confidence you will gain. Your neurons will head in that direction because you're focusing on the positivity and not on the fear of why you wouldn't get the position.

3. Take action:

Now that you have focused on what you truly want, it's time for you to take action. When you make a choice for your first move, focus your energy and attention correctly. When you focus on the actions, your brain and body physically changes.

"The more you practice the behaviors you wish to have, the more neurons work together in order to make that thought a reality," said Miranda. "neurons work synergistically—this means that the more pathways that are activated, the faster your brain is rewired."

Graphic by Deidre Ewers

The science behind song-writing

Kathryn Bloch
Vision Co-Editor

Think about a typical day in your life: wake up, eat, go to class or work, see your friends, go to bed. Chances are in between these events, you heard music. Whether you popped in a CD, plugged in to Spotify or overheard it in a restaurant, music is everywhere. Whether you think about it or not, there is a science behind the songs you hear everyday.

Though there is not a specific formula to writing every single song, there are more effective ways to make songs more popular than their counterparts.

According to Larry Dvoskin, a Grammy-nominated musician and author of "Do What You Love: Songwriting," there are three secrets to writing a best-selling pop song: pairing sad lyrics with upbeat music, beginning songs with a chorus and writing about dreams.

Adding sad lyrics to happy songs creates a dichotomy that is interesting for listeners. "It's the contrast of colors that often makes a great piece of art—the white canvas against whatever color is painted onto its surface," said Dvoskin in an interview with the Huffington Post. "It's this contrarian principle that holds true for many of music's greatest songs: bittersweet words, happy music!"

By using darker sounding chords, according to Dvoskin, the happy nature of lyrics can be pronounced. As far as starting a song with the chorus, Dvoskin has a similar rationale.

"A technique many hit songwriters use is starting

with some variation of the chorus as the intro," said Dvoskin. "Why not subliminally plant the melody, feel, and mood of the chorus into the listener's ear in zero to ten seconds, instead of after a minute?"

Dvoskin's final secret to writing a pop song is to write about things that happen in dreams. "Sting tells the story of hearing "Every Breath You Take" in a dream," said Dvoskin. "The most famous dream story of all is Paul McCartney receiving 'Yesterday' in a dream and writing the placeholder lyric 'Scrambled Eggs' to it originally."

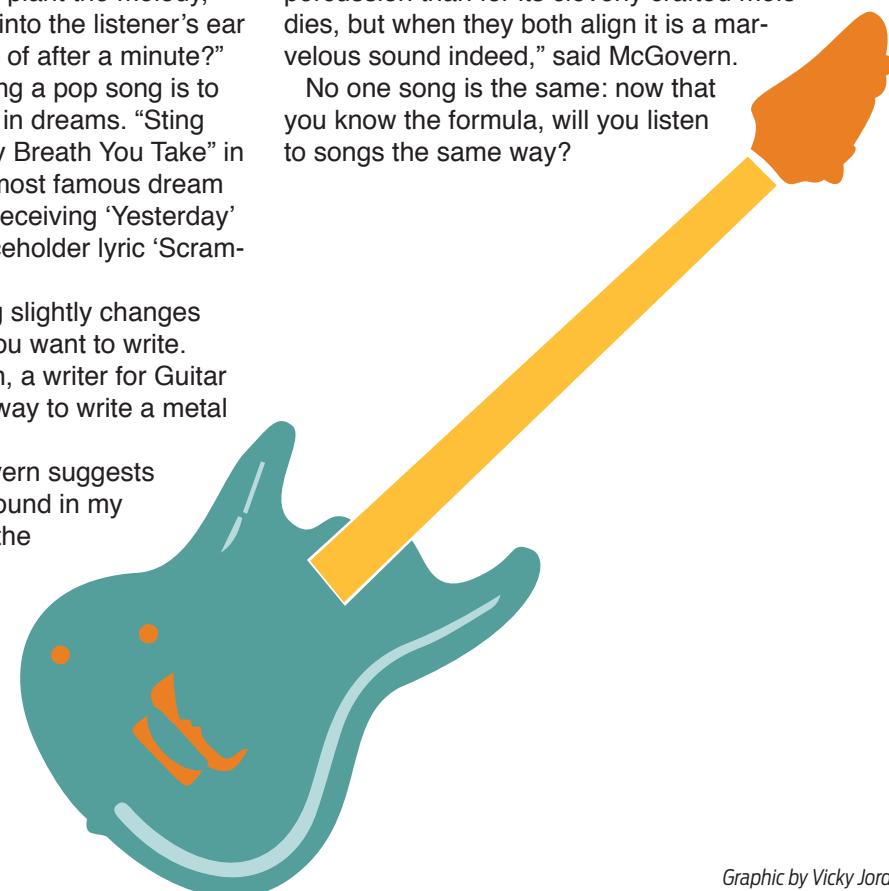
The formula to writing a song slightly changes depending on the genre that you want to write. According to Shawn McGovern, a writer for Guitar World, there is also a specific way to write a metal song.

As far as metal goes, McGovern suggests starting with a melody first. "I found in my own personal experience that the melodies I wrote were never as memorable as the riffs, and the songs didn't possess enough movement to keep me excited," said McGovern.

After establishing a strong melody, McGovern encourages writers to focus on their riffs and rhythms next. "The metal genre is known more for

its intense guitar wizardry and its savage war-dry percussion than for its cleverly crafted melodies, but when they both align it is a marvelous sound indeed," said McGovern.

No one song is the same: now that you know the formula, will you listen to songs the same way?



Graphic by Vicky Jordan

The science behind the perfect outfit

Halle Olson
News Editor

The perfect outfit. Is there one? Parents, professors or friends can tell you how important it is to dress up, but how does your look influence your life? In an article from New York Magazine, Tanya Basu said that how you look can actually determine how you view the world. Researchers with the Social Psychological and Personality Science journal did a study with 60 undergraduate students to see how their clothing choices really affected them. "The students ranked how much better or worse they were dressed compared to the average person, then answered a ten-question, non-academic survey that had two answers: one abstract, the other concrete," said Basu.

Students who were dressed more nicely chose the more abstract answer while students wearing casual clothes chose concrete answers. The abstract answer looked more big picture and the concrete answer focused on specific concepts. While this may not seem important, people who chose the abstract answer (and dressed better) would be better suited for a creative field like arts or literature while those who chose the concrete answer are the future engineers, scientists and mathematicians of the world.

But your clothing choice matters outside of the academic sphere. "Studies have shown that the choices we make at the threshold of our closets can determine our job chances, whether we make a positive first impression, and how we perceive ourselves," said Alina Simone on Slate.com.

Psychologist Kurt Gray actually found a formula for fashion success:

$$\text{Fashionableness} = -.50m^2 + .62m + .49$$

where m = matching z-score

"Don't be too matchy-matchy," Simone said.

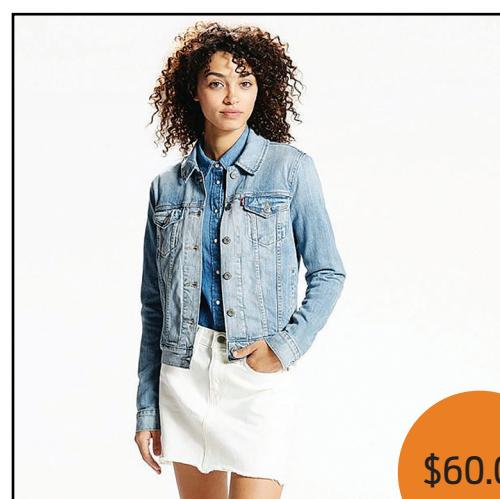
Gray and other researchers began by testing subjects on color combinations with different articles of clothing—pants, tops, skirts, jackets, etc. What they found was that people disliked outfits that clashed but also outfits that were too matched.

In other words, the perfect outfit is based on the "Goldilocks principle." Just right, Simone said.

This "just right" outfit will help your sartorial success, but not necessarily your academic success. As Baus points out that "if you didn't study up for a lit exam, for example, wearing your best interview suit won't magically make you do better. But there's reason to at least consider sweatpants as the perfect outfit for both Netflix and calculus."

If you're looking for the perfect outfit for class, I'll share some advice: stick with the basics. Guys and girls alike can follow this simple outfit formula. Start with a basic pair of jeans and white T-shirt. This is a no-fail base for any look you want to put together.

With spring around the corner, ditch your puffy winter coat and bulky boots for a classic denim jacket and the ever-popular Adidas sneakers. From there, "add just enough individualistic flair to hint you are the kind of person who collects vintage Japanese textiles or appreciates records on vinyl, but not so much as to ignite suspicion you are on your way to a cosplay convention," says Simone. Accessories are what differentiate you from the rest of the campus crowd, so make this basic look your own.



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covalent bonds

The science behind sex

Bob Tomaszewski
Forum Editor

In the hookup culture, what separates us from mammals or other creatures in our sexual behavior?

Shawna Rohrman, assistant professor of sociology and anthropology, said: "It depends on what part of sexuality you are focusing on; obviously with humans we have emotions, so that plays an important part in sexual behavior."

The Huffington Post cites Jared Diamond's book: "Why is sex fun? The evolution of Human Sexuality" to back up the claim that dolphins and bonobo monkeys have sex for pleasure. Among the evidence offered is the idea of having sex even though the female is not fertile.

If emotion is one of the key components to the equation of what makes us different from other animals, then what are hookup apps doing to that distinction?

"We can convey these emotions really easily without really having to talk about them," Rohrman said. But is this making us less able to show emotion? "If you ask a millennial they would say probably not, but if you ask someone who is older, maybe a little cynical about young people, they would say young people are monsters."

"I think that apps like Tinder do depersonalize the process somewhat," Rohrman said. This can be beneficial depending on your goal. If the goal is to not have a lot of attachments, then depersonalizing sex would be a positive part of an app experience. If the goal is to experience emotion or have a connection than it can detract from the experience.

The depersonalization may factor into the cultural differences humans have regarding sexual activity. Depersonalization may also have affects on power dynamics in relationships. She cited a project in which students put on a pregnancy suit and set up a Tinder profile to see if people still wanted to hook up, and not only did they get positive results but the messages they got were "quite disgusting." The explicit sexual behavior with someone that they had never spoken to before.

The anonymity implies that you act in ways that you wouldn't act in person. A perceived power dynamic between men and women may be exaggerated through anonymity. The expectations of a heteronormative relationship can get taken too far. Rohrman said. "But if you're not in a face to face relationship, who cares? What's to stop you from being as obnoxious as you can possibly be."

"What do you have to lose if no one knows who you are?"

Rohrman said in regards to hook up culture, "for females in particular it's a way to have a relationship without impeding their career path as casual sex is more binding for women." She notes that there is a stereotype of women having to potentially quit a career if they are pregnant.

"So the hookup if it is safe," according to Rohrman "allows women to explore that sexuality in the way that men have traditionally done, without imposing a relationship." She continues, "It allows them to still be independent".

Sex was considered negative in the Victorian era. In the mid 1800's, sex outside of marriage was 100% frowned upon. A food was invented to reduce sex drive: the Graham Cracker, named after Sylvester Graham. A sobering thought for the next round of smores by the campfire. "A male losing semen was worse than losing blood" professor Zenchak said. Sex gradually got less restrictive in the '20s until the '30s and '40s, then the sexual revolution happened and then late '70s and early '80s there was an AIDS epidemic and now we're on an upswing. The theme in repressing sex culturally has to do with fear and a lack of knowledge.

Zenchak says you can trace these cycles back to the 1500s. Zenchak argues that people were even working harder to prevent sex in the 1800's than now, without being more successful.

Culturally, we are different from other animals. In the United States alone you may engage in a different type of sexual behavior based on what you religion you were. As far back as the ancient Greeks and Romans Zenchak says, societies would cycle back and forth on sex. Religion provided a sort of counter to the

Roman idea of promoting sex. Religion introduced the idea that sex wasn't for pleasure only. People became afraid of it in a sense as something that might lead to sin.

So to think that this up-swing of relative sexual freedom is limitless is not necessarily the case. A new STD may arise or a form of religion that ideologically limits sexual freedom may become increasingly popular.

Time is not the only determining factor for how sexually repressed or free a culture or society is. The values of the culture matter.

To what degree is sex promoted or repressed? Zenchak provides the extreme example where in some



The science behind love

Kara Kots
Social Media Editor

Love: a feeling, state of mind or attitude we all have experienced in some shape or form. From compassion to a romantic attachment or sexual attraction, "it is a feeling that is constantly sought after" according to senior Jessica DeJong. At times it can be the driving force in our lives, and something that causes us to over-analyze and do things we didn't think we were capable of doing. What is it about the idea of love that drives us to do crazy, uncoordinated, face palm things when we see someone we like?

A recent study conducted at Rutgers University in New Jersey revealed there are three specific stages involved when a person falls in love or has fallen in love. The three stages include lust, attraction and attachment. Although this may be obvious, there is more that goes on inside the body than having awkward sweaty palms and a nervous nail bit. Throughout each stage, different hormones and chemical reactions within the body affect how we feel and engage with that special someone.

The first familiar stage of falling in love is good ole lust. We all know this feeling; it is said to be the initial stage of falling in love. This feeling is instigated by the sexual hormones estrogen and testosterone. According to a study led by New York

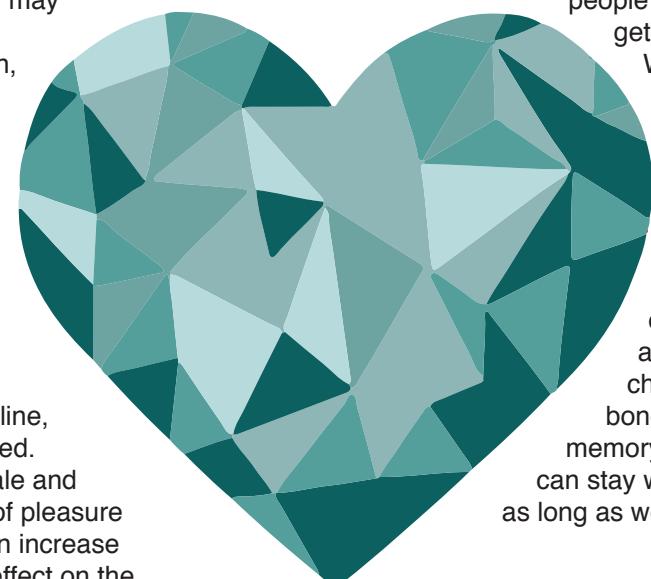
psychologist and professor Arthur Arun, on average, a person takes between 90 seconds to 4 minutes to determine if he or she fancies someone or not. Surprisingly, this has little to do with the all those great pickup lines and smooth-talking some utilize. Instead, 55 percent depends on body language, 38 percent is the tone and speed of a person's voice, leaving only 7 percent for what a person may say.

If you make that worthwhile connection, the next stage is attraction. Have you ever seen a person you may have liked and when it comes time to talk to him or her, your heart feels like it will beat out of our chest and your mouth turns dry as sandpaper? These 'symptoms' are all thanks to the hormone adrenaline. When adrenaline is present in the body, a person's stress response, or cortisol levels, increase while senses decline. Along with adrenaline, dopamine levels in the body are increased. Dopamine is a neurotransmitter both male and females have that stimulate the feeling of pleasure in the body. Scientists have described an increase of dopamine due to love has the same effect on the

brain as taking cocaine.

In the last stage of attachment, it is too late to turn back. Attachment is the bond where two people fall in love wholeheartedly. This is where the hormone oxytocin, also known as "the cuddle hormone", is released. To student Andrew Tadych, attachment love is, "a bond on a deeper level that can help people stay together for life."

Whether we find a special love for life or even a short time in our lives, a powerful chemical bond [or the memory of one] can stay with us for as long as we live.



Graphic by Vicky Jordan

The science behind healthy choices

Jared DeHerrera
Managing Editor

As the winter season drags on, staying active and eating healthy can become increasingly difficult to manage, especially for the non-student athletes on campus. According to the U.S. National Health and Nutrition survey in 2016, less than three percent of American adults live a "healthy lifestyle" according to criteria made of four basic principles: a good diet, moderate exercise, non-smoking and keeping body fat under control.

For college students, taking care of those four things may seem even more difficult due to a busy schedule, a tight budget and the college lifestyle in and of itself. Healthy nutrition and a balanced diet is oftentimes one of the things that college students struggle most with in particular.

"I can tell on days that I don't eat very well, I get really tired throughout the day. If I get a good breakfast in the morning, I don't really need to nap during the day which is nice," said senior kinesiology student Kristian Konneck.

Although a nice breakfast and a healthy diet may be the difference between falling asleep in the back row and retaining valuable class-time information, exercise science program coordinator Marilyn Skarbek believes that for optimal performance, it is essential to maintain an adequate level of physical activity as well.

"Performance means meeting the demands placed on you every day. Everybody has to per-

form, whether it's at work, at school or at home. Exercise can impact those cellular and biochemical mechanisms, helping them perform better to help you perform better," said Skarbek.

When we think about college and living a healthy lifestyle, alcohol usually isn't the first thing that comes to mind. While making healthy choices Monday through Friday it is important to remain mindful of keeping that high-level of performance which on the weekends can often be forgotten.

"It has a caloric value, which people don't think about a lot and it also doesn't have super great effects on the human body. So I would just suggest replacing it with something else," said Skarbek.

On campus, there are several resources available to all students, including the fitness center in Res/Rec, fitness classes,

intramural sports and much more. North Central supplements that with a staff of kinesiology and nutrition experts on campus.

It shouldn't take a rocket scientist to understand how important it is to maintain a healthy lifestyle and consciously make a few healthier choices every day.

Graphic by Deidre Ewers





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