



THE VOICE

Winter 2024

President

Ellora Smith

Vice President

Samhita Badhri

Editor

Misha Kapoor

Graphic Designer

Jhanvi Kichannagari

Writers

Aditya Bura

Shalini Manchi

Nate Wilder

Deepika Bollu

Ellora Smith

Jhanvi Kichannagari

Samhita Badhri

Anika Varma

Addison Garvey





THE CLUB

The Interact Club by Anika Varma

Chelmsford High School has always strived to foster a compassionate and tightly-knit community. The dedicated teachers and staff are continuously striving to establish a secure and inclusive atmosphere where students can freely express their individuality while embracing acceptance. At Chelmsford High School, this commitment is exemplified through the student-led clubs and initiatives that embody the core values of Lions Pride. These values encourage students to persevere in pursuit of their goals, respect each other's beliefs and emotions, uphold integrity, remain dedicated to their studies and responsibilities, and demonstrate empathy towards their peers.

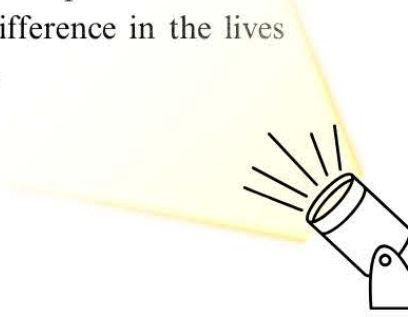
THE INTERACT CLUB

Lions Pride truly shines through the incredible efforts of the Interact Club. This student-led organization, sponsored by the Rotary Association, makes it their duty to raise money to help students and families in need. They went above and beyond earlier this year to raise over \$20,000 for the Bak Family, whose six-year-old child was battling Acute Lymphocytic Leukemia.

SPOTLIGHT

Every other Monday after school at 2:00 pm.

The Interact Club is a beacon of hope in our community, dedicated to supporting students and members of the Chelmsford Community. Their impact goes far beyond fundraising. Interact has organized impactful events like Meals of Hope, where students came together to package over 14,000 meal packages for donation to the Chelmsford Food Pantry and the Merrimack Valley Food Bank. They also regularly volunteer at the Chelmsford Food Bank, assist Chelmsford High School students with prom and cotillion expenses, and hold events at the Department for Children & Families of Chelmsford. But their work doesn't stop there. The Interact Club is gearing up for a large-scale calendar raffle in May, which will serve as their main source of income for the rest of the school year. So, be sure to keep your eyes peeled for that exciting event! Additionally, they organize various smaller fundraising events throughout the year and even bring some cheer to the dreary month of March with their House Olympics. The Interact Club is a true testament to the power of unity and compassion. Their dedication to making a difference in the lives of others is truly inspiring.

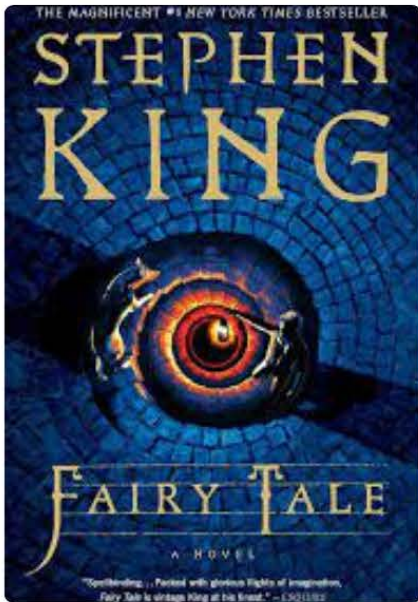


ABOUT THE ADVISOR

Undoubtedly, the driving force behind all of this is none other than Marian Smith, the brilliant mind behind the club. Not only does she flawlessly handle the club's affairs, but she also serves as the class advisor for the class of 2024. Each day, she puts in immense effort to positively impact the lives of her students and colleagues, constantly pushing them to greater heights.

SOME UPCOMING EVENTS

- The Candy and Carnations fundraiser
- The May Calendar Raffle
- CHS House Olympics



Book Review

by Shalini Manchi

Title - Fairy Tale

Author - Stephen King

Published - September 6, 2022

Fairy Tale by Stephen King is a fantasy novel about a teenager's discovery of a whole different world and his adventures in this land. His adventures, however, start long before he even discovers this magical land, right from the time when his mother tragically passes away due to a construction error. His ordeals with his father's coping mechanisms with their loss become a tough time that ends up teaching him how to support himself and learn to put himself in others' shoes. As the novel progresses, the protagonist, Charlie Reade becomes a local hero when he calls 911 to help out his old neighbor, Howard Bowditch when he meets with an accident. During Mr. Bowditch's recovery at the hospital, Charlie cares for his German Shepard, Radar. The two develop a special bond leading to Charlie staying back to care for Mr. Bowditch after his recovery as well. Charlie's time as a caregiver provides him with insight into how the world really views a kid who has responsibility on his shoulders. His time with Mr Bowditch grows into a strong bond leading Bowditch to provide Charlie with his biggest secret--the secret in the shed behind his house. Charlie's life after knowing this secret becomes an exciting one filled with many adventures as he explores the land to find a solution to help his ailing friend Radar. Overall, Fairy Tale combines values from both the modern and realistic world as well as the land of imagination, like the one we would see in a fairy tale.

WELCOME TO

Five O'Clock Tea

By Sambita Badhri and Jhanvi Kichannagari

The school year's in full swing and we're back with the Winter Edition of Five o'clock Tea. In this issue, we headed to the Town Center to interview Lauren Cochran and Dan Adamsky of the Chelmsford Center for the Arts to learn about the building and the opportunities it hosts.

The Chelmsford Center for the Arts Team



Lauren Cochran, director of the center, taught music and theater for twenty-six years at Chelmsford High School, gaining over one hundred directorial credits, and earning numerous awards for her theatrical productions. Cochran holds degrees from Suffolk University, Emerson College, and American Repertory Theatre, along with a Bachelor's in Music Education in voice, and a Master's in Education. Additionally, Cochran is experienced in improv and community theater. Inducted into the Chelmsford High School Hall of Fame, Lauren is excited to bring her passion for the arts to the Chelmsford community.



With over 20 years of experience in theater and live events, Dan Adamsky took on the role of Technical Director in 2021. Adamsky has worked as a director, stage manager, stage carpenter, and electrician, with lots of experience as a sound designer and live audio engineer. He worked in New York City on shows from elementary school to Off-Broadway and later moved to the Bay area where he worked for multiple theater companies before transitioning to corporate events. Now a part of the CCA team, he wants to create a fun and inviting space for the community.

The Chelmsford Center for the Arts began as the Chelmsford Town Hall from 1879 to 1981, reigning briefly as a recreation center afterward. In 2009, an arts committee was formed and began to raise money to restore the building--even building an addition to the building in 2012. Since then, the building has been the Chelmsford Center for the Arts, a place for locals to engage with and in whatever form of art makes them happy.



Joining as director in April 2023, Lauren Cochran has already hosted a plethora of events. The CCA has started its own theater company now working on its second ten

minute play festival set to take the stage in June, hosted an original musical, and brought in a theater company from Lowell to perform.

The CCA truly lives up to its name, hosting events in all branches of the arts. Their writers' group fosters a strong sense of community, providing an environment for writers to share their work and ideas. They meet twice a month discussing everything from their

latest works, writing based on fun prompts, and even sometimes working on ten-minute plays. They also host the Chelmsford Arts Society and the Garden Club. along with art classes and crochet groups. Open to the public, a range of events such as the Black Trivia night, Jazz brunch, and various open mics are constantly being organized.

But what does the CCA have to offer for high schoolers? Well as they say,

“The CCA is the place to play”

They hold karaoke nights once a month, trivia nights, shows and performances, and game nights in their luxurious cafe, complete with plush couches and lavish seating. The cafe also has a stage and speakers, along with a screen for karaoke nights. The best part--they serve snacks and mocktails! Furthermore, for all of you looking for volunteer opportunities, the CCA loves having high school volunteers at their events. For more information email the center at CCA@chelmsfordma.gov.



When asked what the future holds for the CCA, Cochran said,

“My goal is for everyone to know that it is a valuable part of the community.”

She hopes to create a thriving theater community, get people of all ages involved and attending events at the CCA, and wants the town to make the Center for the Arts a part of their own routine. In the future, she hopes to bring back the art galleries that the Center previously hosted.

PITCH PERFECT!

Chelmsford Crescendos win the New England Voices Festival

By: Addison Garvey

At the New England Voices Festival in Plymouth, Massachusetts the Crescendos, a Chelmsford High School acapella group placed top three against eight other acapella groups. The NE Voices Festival was created by New England music teachers looking for a way to improve the skills of musicians through connection and feedback. The festival is two days and on January 26th the festival began with eight acapella groups performing, including the Thursdays, another acapella group from Chelmsford High School. After the performances, the top three winners were determined, including the Crescendos. On the second day of the festival, January 27th, all of the acapella groups took part in workshops to better their voices, work on choreography, breath support, and overall work to become better musicians. It is on this day that the winning groups perform again as well. The Chelmsford High School members of the Crescendos include Cailin Deutschmann, Isabella Travers, Ananya Bharti, Karen Khela, Lilly Bean, Lily Faucher, Maya Belmonte, Samhita Badhri, Tiffany Vu, Lindsey Monke, Madison Breveleri, Milo Betton, Riley Tambo, Sahithi Chaturvedula, and Jocelyn Pica who received the outstanding singer award.



HOW IMPORTANT ARE SCHOOL BREAKS?

By: Ellora Smith

It seems like yesterday we were starting school in September, but we are already halfway through the year. With midterms passed us now, we get to look forward to February vacation, a time to relax in between the heavy workloads of school. However, not all schools in Massachusetts get to have February vacation this year, due to the teacher strike in Newton, the public school system has decided to cancel it to make up for all of the days they have missed. In total, they missed 11 days of school, and are also considering making up the lost days by taking time from April break as well. While the students have missed quite a bit of school due to the strike, this is not like a regular school vacation free of worries. They have had the constant looming presence of when they will go back and have to make up all of the missed material. Missing a school vacation would certainly upset students, but could it also impact their well-being? How important are school vacations?

At Chelmsford High School, and many other schools, we get five school breaks a year: Thanksgiving, Holiday, February, April, and Summer. While these all vary in different lengths, they are still vastly important to students' mental well-being. These recesses help alleviate some of the stress associated with school and help kids be able to relax. Without these periods free of learning, students are not given the opportunity to unwind after the busy weeks. This is a stressful time for students, and February vacation especially is a good time for catching up on work if needed.

In addition, these vacations allow students to spend time with their family and friends. Many times kids do not get to spend quality time with their families after school due to balancing homework and extracurricular activities. Families will go on vacations together as a way to bond, and February break is



a prime time for that. The Newton students whose parents still had to work at their regular jobs during the teacher strike, now have to worry about missing work if their family had a vacation scheduled during that time.

Getting rid of these essential school breaks should not be the solution to the students not being able to learn due to the teachers. The students of Newton were not the ones who willingly wanted to miss the eleven days of school, so they should not be punished for this, as these sparse breaks from school are crucial.

AN ODE TO A RIVALRY

BY: NATE WILDER



Sports offer us a window into another dimension. One where our heroes ride off into the sunset with the wind blowing in their hair. A world in which good things happen to good people, and everything that goes around, does indeed come back around. It's a reality that, quite frankly, we don't deserve. However, every so often, there comes a special time and place that demands nothing but this window being opened for all to see. I can't think of a better place than John Conrad Memorial Gymnasium on January 30th, 2024. For, this was the night that the Chelmsford Lions defeated their bitter rival Billerica Indians, 55-37. This win hardly moved the needle for the Lions in a standings sense on the season, as it moved them to 4-8. But if you went up and asked a Lions player or someone from the student section that night, I bet they would give you a similar enthusiasm expressed to when the Super Bowl-winning quarterback shouts into the camera, "I'm going to Disney World!"

This was the only second meeting between Billerica and Chelmsford's newly minted head coach, Chris Giordano. While his Lions fell to the Indians in Giordano's maiden voyage to BMHS, it certainly gave the head coach motivation to make a statement and show that he and his team wouldn't be pushed around. From speaking with him and around the team in the days prior, you would think they were about to play for the state championship. In such a historic rivalry like Chelmsford-Billerica, can you really blame them?

The game was a close affair for the first quarter, as the Indians held a 13-11 lead at the beginning of the second. After a scoring run in the latter part of the first quarter by the Lions, the Tundra had awoken from hibernation and had their sight set on the guys in green. It was in this second quarter that the Lions went on a 7-2 to swing the momentum in their favor for the better part of the half. This run was led by Chelmsford Guard Jake Brooks, who sank multiple threes and performed acrobatic layups to put the Lions up 25-21 at the break.

A 4 point lead at halftime is a good margin for the winning team, but by no means at all is it a comfortable one.

Going into the third quarter, the Lions were likely looking to attain the success they had in the previous quarter and conserve the lead. It was in this quarter that we departed reality.

At the beginning of the third quarter, Chelmsford led 25-21. At the end of the quarter, the Lions led 45-27. For 8 minutes, the Lions and the Tundra took Billerica behind the damn woodshed. The Indians were scrambling to find an answer to the Lions' offensive assault, but they were hemorrhaging points. This trend continued into the final quarter, as Chelmsford went on to win, 55-37. This win improved the Lions to 4-8 on the year, while Billerica fell to 3-12. I really hate the saying "get real". People often say it when they're expressing some sort of inheirt truth that



Midterms! Exciting or Devastating?

Deepika Bollu

Throughout the years, midterms have been removed from our CHS curriculum. If we think about it, no one knows much about them. An important question to pose to students and staff is, should we bring midterms back? I believe that the answers to this question will be drastically different, as another week of stress is not something we all want. Midterms do however have their ups and downs: they can still be daunting and stress-inducing however they are good for students and will help with academic growth.

Though midterms are scary, there are many ways to prepare for them. Midterms only consist of half of the material that has been covered, meanwhile, final exams consist of the material covered all year. One tip is to start studying early. I'm sure that preparing material and reviewing the course a week or two before the exam will reduce stress in the long run. My next point is to stay well-rested. Though studying can force students to stay up late, good sleep is incredibly important. A relaxation method/technique is also crucial to do well during exams. Anxiety, stress, and pressure may start to rear their ugly heads closer as the day of midterms starts nearing. However, simply shutting your eyes and taking deep breaths can ease these strong feelings.

Here are students opinions:



“I think for some classes it isn’t necessary, it doesn’t necessarily matter to show your work when the teacher already looks at your work. But, I can’t have much of an opinion since this is my first midterm.”

- Freshman Student

At CHS, midterms are considered finals for five-credit classes. Most students say that these classes are not difficult and the ‘midterms’ aren’t challenging either. However, many of the 5 credit classes that CHS offers are more challenging than others, thus these preparations will help.



The Power of Bacteriocins

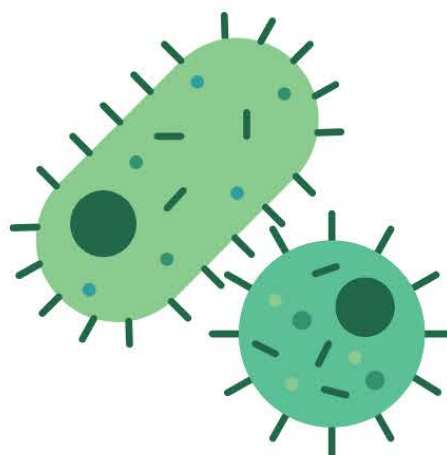
Nature’s Microbial Warriors

by **samhita Badhri**

In the world of microbiology, bacteria are not just organisms merely existing. In fact, they engage in complex battles for survival amidst which, one weapon stands out: bacteriocins. Bacteriocins are proteins produced by bacteria to inhibit the growth of similar or closely related strains, giving them a competitive advantage in their environment.

Lurking in the shadows, the antibiotics crisis is a global problem, not addressed by many. Antibiotic resistance continues to rise and the efficacy of antibiotics against bacterial infections continues to decline. Globally, about

4.95 million deaths per year are associated with antimicrobial resistance (World Health Organization) .Former director of the World Health Organization, Margaret Chan stated, “A post-antibiotic era means, in effect, an end to modern medicine as we know it. Things as common as strep throat or a child's scratched knee could once again kill.”



Unlike traditional antibiotics, often chemically produced, or produced by fungi, bacteriocins are synthesized by the bacteria themselves. Bacteriocins work by targeting specific parts of the bacterial cell such as the cell membrane or cell wall. Some damage the cell membrane, leading the cellular contents to leak out and causing cell death, while others interfere with cellular processes such as protein or nucleic acid synthesis. One of the greatest advantages is that they are a narrow spectrum, meaning they only target certain bacteria, unlike many antibiotics, which attack both

pathological and naturally occurring, even beneficial bacteria.

These unique traits of bacteriocins have many potential uses, be it in agriculture, food preservation, or even medicine. In agriculture, bacteriocins can help control pathogenic bacteria in crops without exposing them to harmful antibiotics. Additionally, bacteriocins have been used as natural preservatives in food products to inhibit the growth of pathogenic bacteria and help prevent food from spoiling. This can extend their shelf lives without the harmful effects of chemical preservatives. Last, but certainly not least, bacteriocins have immense potential to be used in medicine as alternatives to traditional antibiotics and could help combat antibiotic-resistant bacterial infections. Because of their narrow spectrum, they are less likely to disrupt beneficial microbiota and could also help minimize antibiotic resistance.

Despite their potential, many challenges must be overcome before bacteriocins can fully be used. Production methods must be studied, and the situations in which they are released, and the regulations for bacteriocins still need to be further studied. In order to use them as drugs, an immense amount of research and testing must be conducted, and pharmaceutical companies may not be willing to risk a large amount of money on research and development of something so novel (Investopedia reports the average R&D costs nearly \$4 billion).

Bacteriocins are a fascinating class of antimicrobial agents with enormous potential. Perhaps as scientists continue to research and study them, they can become valuable tools in the fight against antibiotic resistance and can provide safer and more sustainable healthcare options for all.



NFL PLAYOFFS 23-24

By: Aditya Bura

ROUND I

There were a total of 6 games played in the first round of the playoffs, and the top seed from each division were the Baltimore Ravens from the AFC Conference and the San Francisco 49ers from the NFC. Some favorites going into the playoffs were the 49ers due to their amazing regular season performance, and also the Detroit Lions, as they have not been in the playoffs since 1991, over 32 years ago! I wanted the Lions to go far in the playoffs

because they were the underdogs. In other news, The Houston Texans also made the playoffs with their rookie quarterback CJ Stroud, who led them to a 10-7 regular season record, 1st place in the AFC South, and 4th in the AFC alone. After a couple of years in a winning drought, the Texans finally turned the organization around and got back on their feet to make the playoffs. Apart from these teams, the other teams that were in the playoffs were The Browns, Chiefs, Dolphins, Bills, Steelers, Buccaneers, Eagles, Rams, Cowboys, and the Packers.

ROUND 2

Quarter Finals: Half of the 12 teams have been eliminated and now it comes down to the last 4 teams. First up the Chiefs VS the Bills, both teams start with a low-scoring first quarter, but when the 2nd quarter rolls around, both teams start to get into the endzone.

In the 2nd quarter alone, the Bills scored 14 points while the Chiefs scored 10. Going into halftime the score was 13-17 with the Bills leading. The Chiefs received the ball in the 3rd quarter to start it off and came out with a quick touchdown to make it 20-17 Chiefs leading. The Bills get the ball following the Chiefs touchdown, and make their way down the field to score a touchdown making them lead by 4 points. When the Chiefs get the ball back they immediately answer and score a huge touchdown making the score 27-24. The two teams go back and forth with no score and it comes down to 1 minute and 47 seconds left, it's 4th and 9 and the Bills are going to attempt the field goal. Hitting this field goal ties the game and would send it into overtime. The ball is snapped, he kicks it, and it's wide right! The Bills missed the field goal to give the Chiefs back the ball with 1:30 left in the game. The Chiefs wind down the clock to Zero and now are headed to the semi-finals. The other games flew by, with the Ravens winning over the Texans, the Lions beating the Buccaneers, and The 49ers coming out on top over the Packers.



ROUND 3

Semi-Finals: All 4 teams left in the playoffs are just one win away from the highly anticipated and coveted Super Bowl LVIII. The first game up was the Chiefs VS the Ravens. Both teams come out hot scoring a touchdown each in the first quarter, but in the second quarter, the Chiefs take control of the game and score 10 points. Now going into the half the score was 17-7 with the Ravens down by 10 points. In the 3rd quarter, both teams were scoreless and in the 4th quarter the Chiefs could not score a touchdown and neither could the Ravens. The closest the Ravens got was for a field goal. Because of this, the final score was 17-10 with the Chiefs on their way to the Super Bowl. In the NFC the 49ers were faced up against the Lions. Could the 49ers' 24-year young quarterback beat the nerves and take the team to the Super Bowl, or will the veteran quarterback Jared Goff come out on top for the Lions? Going into the first half the Lions were up 24-7, a 17-point lead against the 49ers. The tensions were high because in just 2 quarters the 49ers had to come back so they could make it to the big game. In the 3rd quarter, the 49ers looked like a brand new team, coming out and scoring 17 points tying the game at 24-24. As the 4th and final quarter rolled around the Lions responded by scoring a touchdown making it 31-24. Now the 49ers were determined to win, scoring a touchdown and then getting the ball back from the Lions, and then finally hit a field goal to win the entire game

