

MHSA NEWS

September Newsletter

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Introduction to MHSA Newsletter

Hello! We're excited to announce that starting this month, MHSA will be publishing a monthly newsletter. This newsletter is designed to keep you informed and engaged with everything happening in the Medical & Health Sciences Academy. Each month, you'll find updates on MHSA activities, upcoming events, student opportunities, and cool medical or healthcare facts you might not know! We hope you enjoy the first issue — and if you have suggestions or things you'd like to see featured, let us know! Want to help write this newspaper? Firstly be apart of MHSA, and message 209-834-7266.

It was a meaningful experience for all who participated, and we're proud to have been part of such an impactful event!

Heart and Stroke Walk Pictures



MHSA Represents TUSD at the Heart & Stroke Walk

On September 13, 2025, MHSA was honored to represent TUSD at the 209 Heart & Stroke Walk, hosted by the American Heart Association. The event took place in River Islands, Lathrop, and brought together community members, organizations, and healthcare professionals in support of a vital cause. The Heart & Stroke Walk is a fundraising event that supports life-saving research and initiatives to combat heart disease and stroke, two of the leading causes of death in the U.S. MHSA students had a fantastic time exploring the many hospital and health-related booths, learning about careers and advancements in healthcare, and walking 4 miles to support fundraiser.

MHSA Field Trip to Sutter Health

MHSA students had the opportunity to visit Sutter Health on a special field trip. During the visit, students toured different departments, including the pharmacy, and got to meet the Chief of the Emergency Department. They also spoke with a respiratory therapist and a radiologist, who shared their experiences and explained what their jobs involve. Students even got to take part in a fun "Guess the Price" game, where they guessed the cost of different medical tools and equipment. It was a great learning experience, and we're thankful to Sutter Health for welcoming us and taking the time to teach us more about careers in healthcare.



Topic of the Month

Cracking the Code of Cardiac Care: How AI-Enabled ECG Could Solve Key Challenges in CVD Diagnosis

The Rising Cost of Cardiovascular Disease

Cardiovascular disease (CVD) is one of the leading causes of illness and death around the world. It doesn't just affect people's health—it also places a huge financial burden on families and the healthcare system. According to the American Heart Association (AHA), the total cost of cardiovascular disease in the U.S. is expected to triple to \$1.8 trillion by 2025. This includes direct medical expenses like hospital visits and medications, and indirect costs such as lost work time and long-term disability care. On average, a single patient with heart failure spends about \$24,383 each year.

Barriers to Early Detection

One of the biggest challenges in fighting CVD is that many cases go undiagnosed until it's too late. Even though we now have better technology to detect heart problems early, many people—especially those in rural or underserved areas—don't have regular access to advanced heart monitoring tools. This makes it harder to shift from reactive care (treating a problem after it happens) to preventive care (catching and treating issues early).

AI Technology as a Solution

To help solve this problem, AI-powered ECG technology, also called remote cardiac monitoring, is being developed and used more often. This technology allows for continuous monitoring of a person's heart, even outside of hospitals. It uses artificial intelligence to detect issues faster, more accurately, and often before symptoms even appear. This means patients can get help sooner, and doctors can make better decisions without being overwhelmed by large amounts of data.

Five Key Benefits of AI Monitoring

There are five main ways AI-enabled cardiac monitoring can improve care:

1. It provides continuous tracking instead of just occasional check-ups.

2. It uses AI analysis instead of relying only on human interpretation.
3. It reduces false alarms by providing more accurate data.
4. It allows for early intervention before serious symptoms show up.
5. It helps reduce the workload for doctors by sorting and analyzing data automatically.

Making Heart Care More Accessible

When used correctly, this technology can bring high-quality heart care into homes, making it more accessible to people who might not otherwise receive it. It can also lower hospital readmissions, reduce emergency room visits, and cut healthcare costs.

Looking to the Future

As the number of people affected by heart disease continues to grow, tools like AI-powered remote monitoring could be a game changer. They offer a powerful way to improve patient care while lowering the financial burden on both individuals and the healthcare system. The future of heart health may depend on combining technology and prevention to save lives.



Upcoming MHSA activities

Here are the upcoming activities planned for MHSA, dates are to be announced!

- Meeting after fall break
- Trunk or Treat

For more information visit <https://infobionic.ai>.