

ACS  
Chemistry for Life<sup>®</sup>

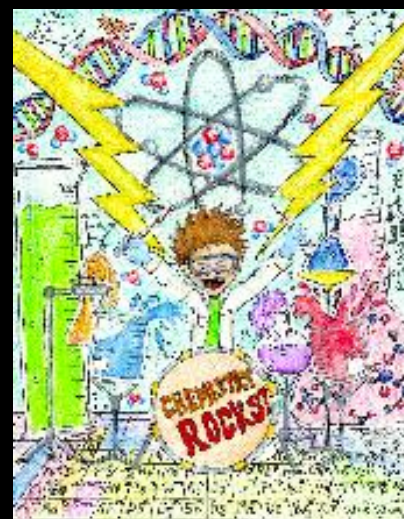
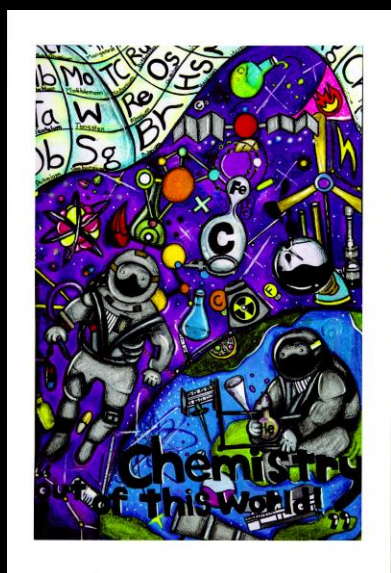
The American Chemical Society



# The 2023 Southern Nevada High School Chemistry Poster Contest

## “The Healing Power of Chemistry”

Sponsored by the Southern Nevada Section of the American Chemical Society





**ACS** Local Section  
Southern Nevada

**American Chemical Society**

**Southern Nevada  
High School  
Poster Contest  
Founded in 2011:  
“The International  
Year of Chemistry”**

**Saturday  
December 02, 2023**

**Hosted at the Marjorie Barrick Museum of Art  
Las Vegas, Nevada**

# The American Chemical Society

- Over 155,000 members worldwide
- One of the Largest Scientific Organization in the World
- Every member gets Chemical and Engineering News – A weekly publication from ACS

# SHOWCASING CHEMISTRY

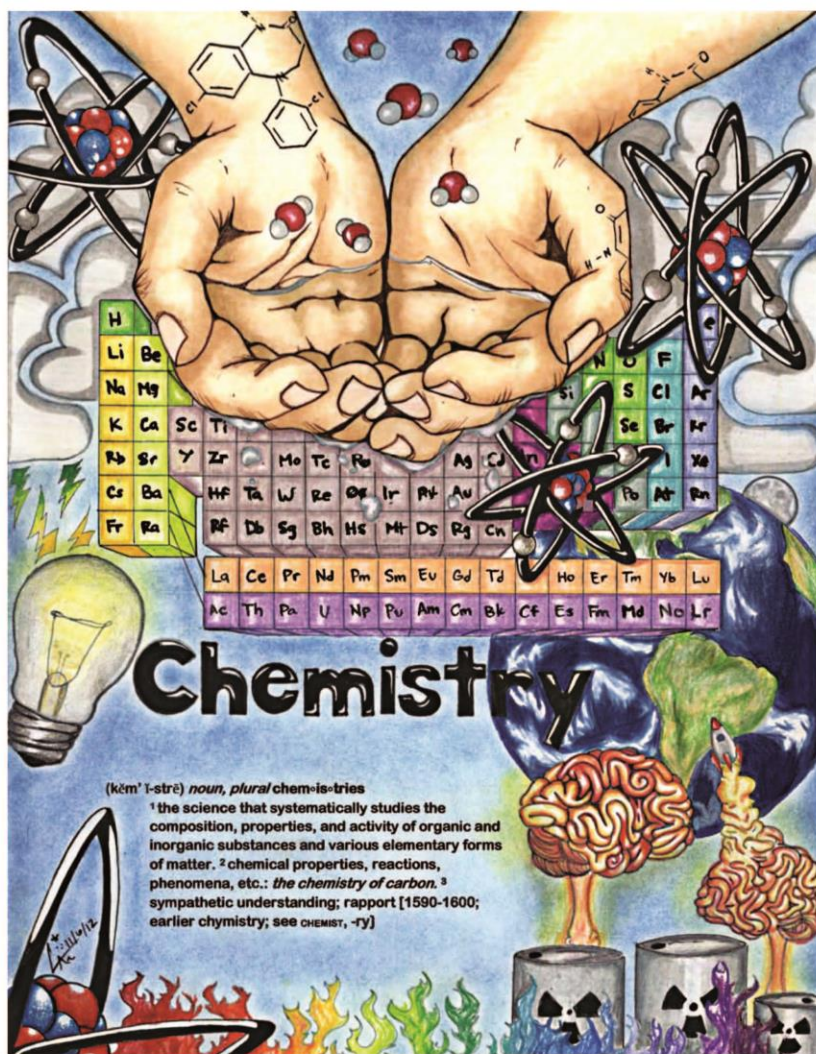
Through its annual **POSTER CONTEST**, the ACS Southern Nevada Section inspires students to explore the power of chemistry

SUSAN J. AINSWORTH, C&EN DALLAS

**IF YOU'RE A FAN** of the idea of promoting science through art, you may be intrigued by a burgeoning program set up by the American Chemical Society's Southern Nevada Section.

When brainstorming imaginative ways

to celebrate the International Year of Chemistry in 2011, the section decided to sponsor a chemistry-themed poster contest for area high school students. Not only was the competition successful from the get-go, but it has now morphed into an an-



nual event that continues to influence the local community.

Currently gearing up for its third year, the contest has inspired talented young artists to produce posters that vividly illustrate concepts such as basic chemical principles and chemistry's broad application in fields as diverse as pharmaceuticals

and alternative energy.

**FIRST PLACE**  
 Christy Adaya,  
 grade 12,  
 Shadow Ridge  
 High School,  
 Las Vegas.

Most important, it has served as an effective outreach tool, drawing interest from students who might not otherwise ponder the power and benefits of chemistry,

observes Roger Rennels, the section's public relations chair, who came up with the contest idea.

As the section set out to launch the contest in 2011, it drew heavily on the resources of the local public school district. The Clark County School District's School-Community Partnership Program and its assistant director, Judy



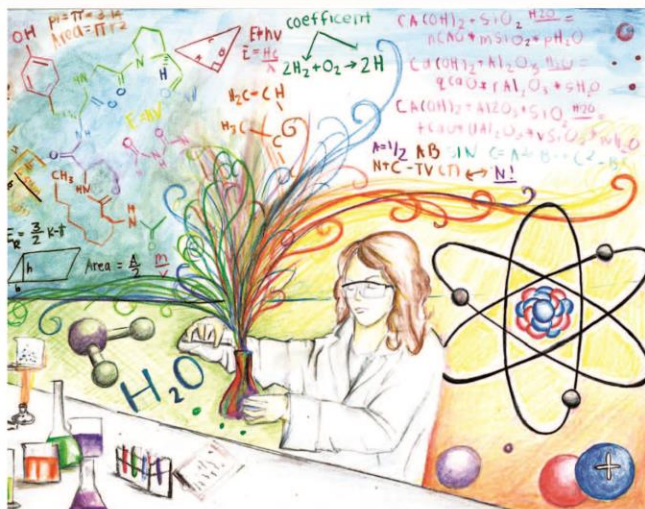
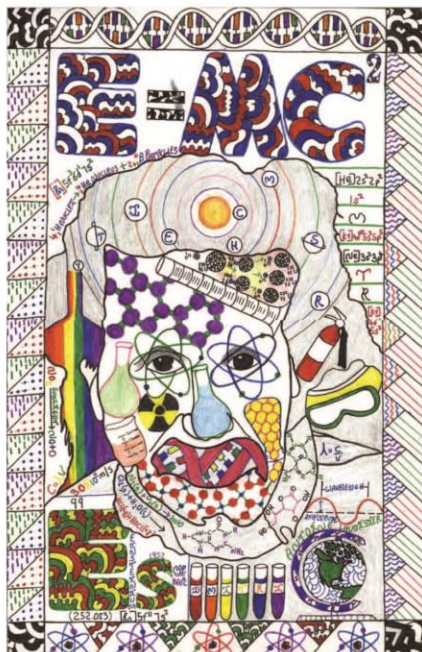
**THIRD PLACE** Rileigh Sorenson, grade 12, Foothill High School, Henderson, Nev.

Myers, provided critical guidance and help implementing the project. For example, Myers encouraged the section to limit the contest to high school students to control costs, and she provided information about successful contests held in the district in the past, which helped the section structure its poster contest and define its rules.

More specifically, Myers advised the section to offer cash prizes, for students as well as for the teachers who sponsor the winning posters, as a way to maximize the number of contest entrants, Rennels says. More than 200 students participated in 2012.

First-place student winners receive \$500, and second- and third-place finishers get

**RUNNER-UP** Yoseph Hobe, grade 10, Rancho High School, Las Vegas.



**RUNNER-UP** Deborah Diaz, grade 9, Southeast Career Technical Academy, Las Vegas.

\$250 and \$100, respectively. In addition, each sponsoring teacher wins half of the amount that his or her student receives. In addition, in 2012, the top eight student runners-up each received \$25 gift cards, which were donated by VWR International, a laboratory supply and distribution company.

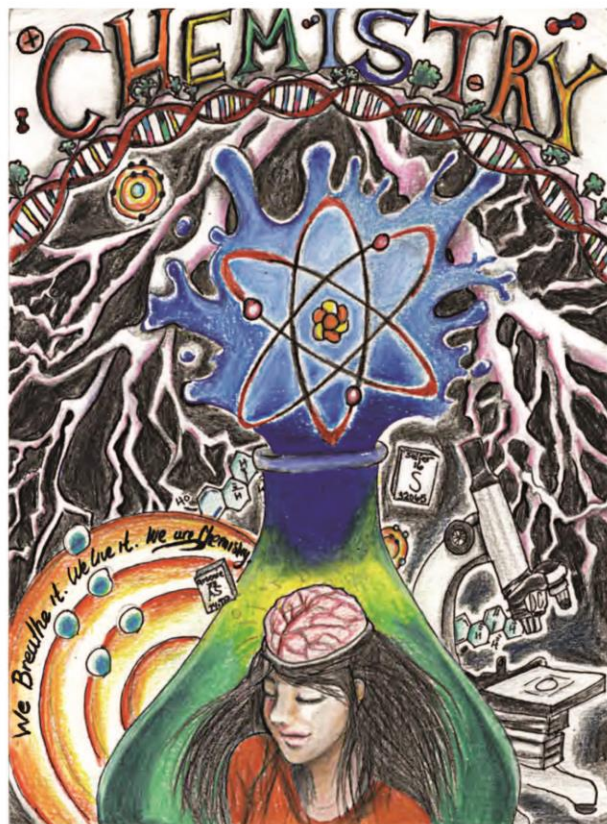
Rennels, along with fellow Southern Nevada Section executive committee members Onofrio (Dick) Gaglione and Kazumasa (Kaz) Lindley, serves as a judge for the contest.

To further enhance its outreach power during the most recent awards ceremony, the section invited undergraduate and graduate students to present research posters that they had entered in another contest the section sponsors, Rennels says. Through this effort, he explains, “we wanted to share the high school students’ posters with the greater chemical community in southern Nevada, and we wanted the high school students to see how the college students’ posters are used to convey scientific knowledge.”

Rennels believes that the high school poster contest has been effective in sparking curiosity about chemistry among students. Recently, an art teacher told him that many of her students who were participating in the contest frequently

went across the hall to talk with the chemistry teacher about chemistry. “And that,” Rennels says, “is something many of these students would never have done if not for this contest.” ■

**SECOND PLACE** Ashley Armenta, grade 9, Southeast Career Technical Academy, Las Vegas.



**& MORE ONLINE**

See more of the dynamic, chemistry-focused posters that garnered contest honors at <http://cenm.ag/poster>.

# Runner Ups

# Jordynn Thomas

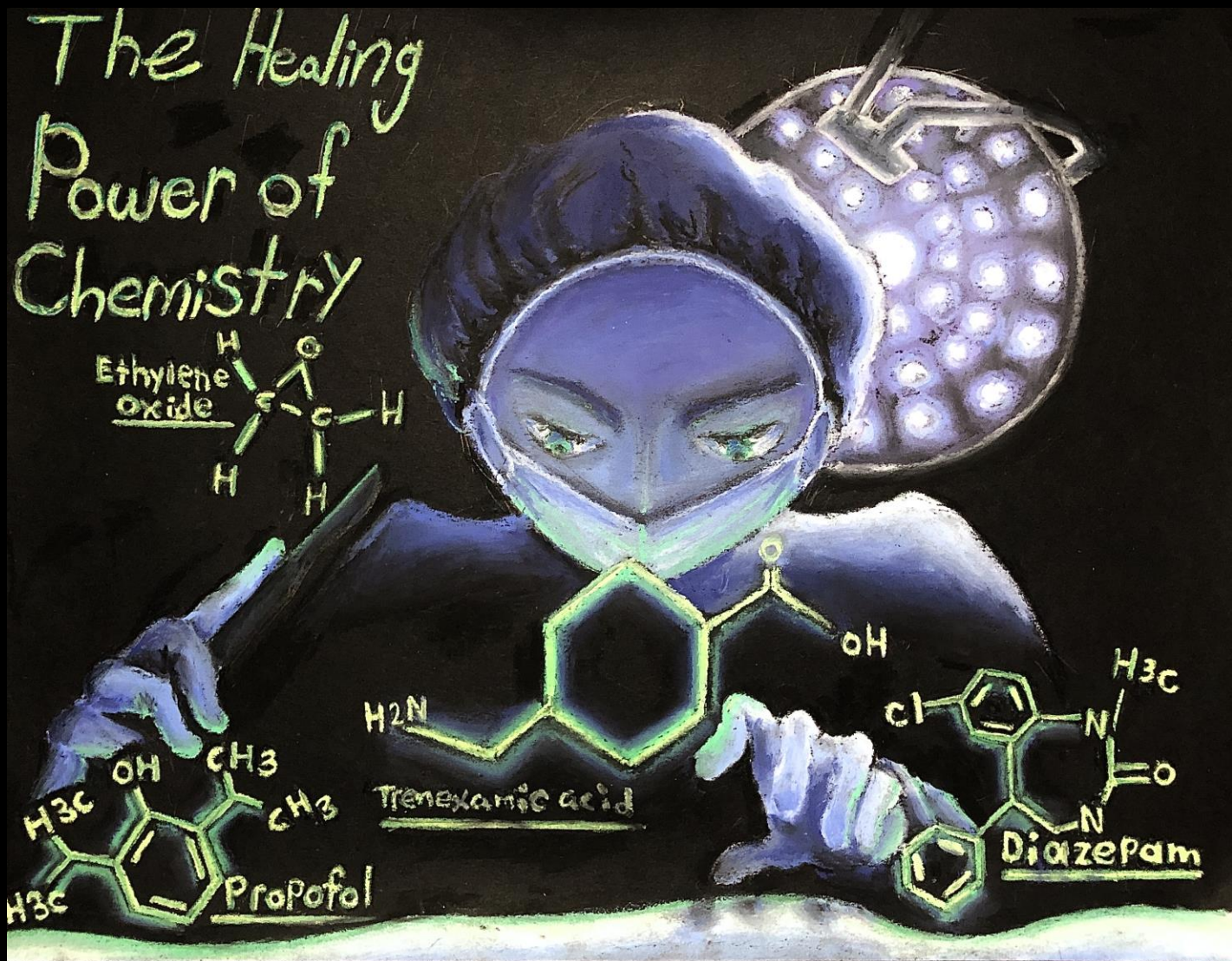
## Healthy skin, for the win!



Advanced Technologies Academy  
(Kevin Chung)

Emi White

# The Healing Power of Chemistry

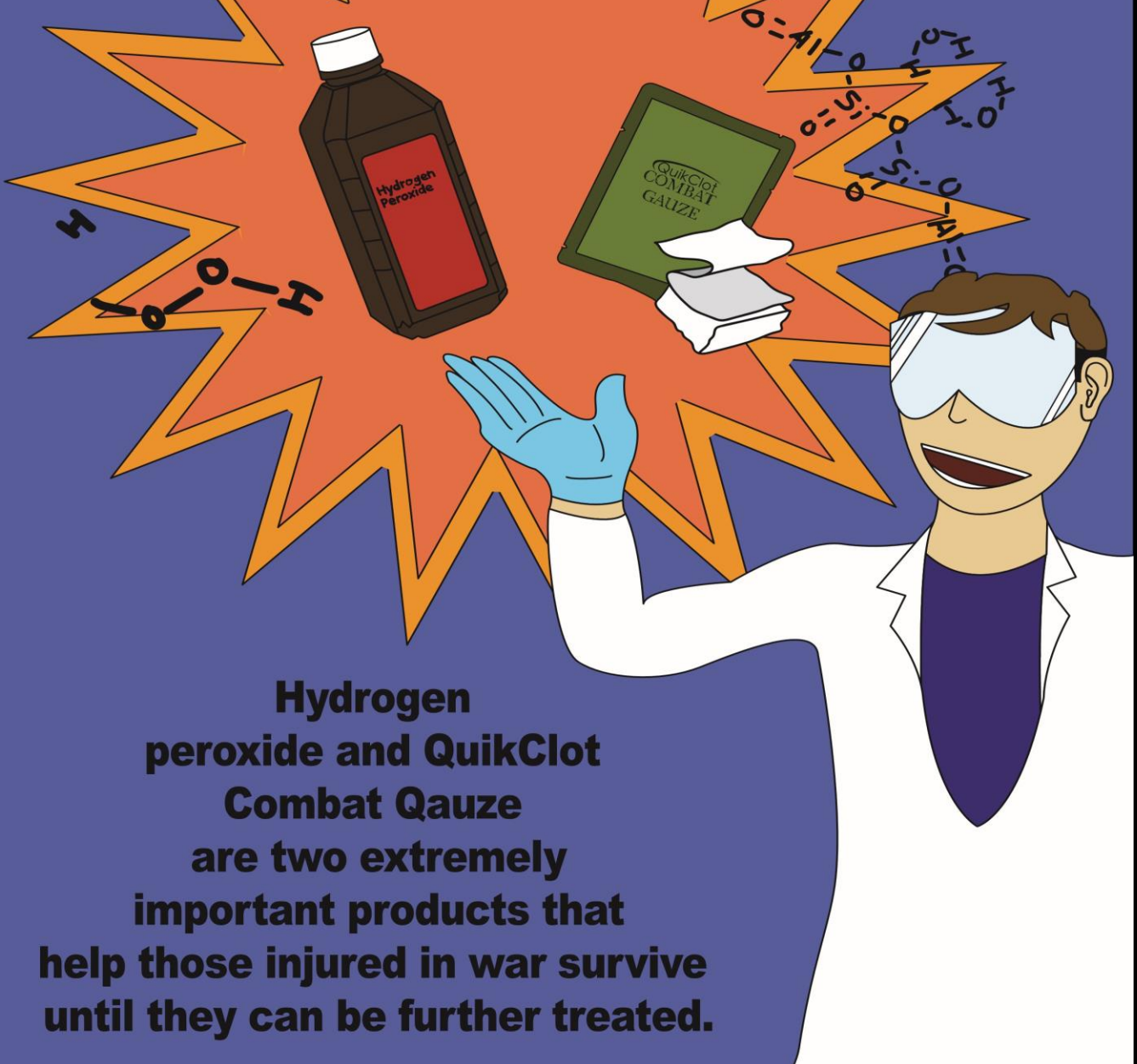


Green Valley High School  
(Clayton Stewart)



# Kai Fujii

## THE HEALING POWER OF CHEMISTRY



**Hydrogen  
peroxide and QuikClot  
Combat Gauze  
are two extremely  
important products that  
help those injured in war survive  
until they can be further treated.**

**Advanced Technologies Academy  
(Edwin Cruz)**

# Tammy Nguyen

## Crafting Casts: The Movie

**FIBERGLASS**

$\text{SiO}_2$

Fiberglass casts are designed to help support the bone and keep it in place so the body can fix it and recover properly

**STOCKINETTE FABRIC (wool)**

**COTTON**

$\text{C}_6\text{H}_{10}\text{O}_5$

Cotton and stockinette fabric is used to cushion the injured body part and prevent irritation and relieve chafing

**TIGERS 11**

**CRAFTING CAST**

**IN THEATERS NEVER**

The poster features a central character, a girl with brown hair and yellow eyes, wearing a red t-shirt with 'TIGERS 11' and black shorts with yellow stripes. She is holding a blue and pink cast. The background is a light blue sky with a green hill at the bottom. Various chemical structures are drawn around her, including a polymer chain for fiberglass, a complex organic molecule, and the repeating unit of cotton cellulose. Text boxes provide information about each material's purpose in casting.

Advanced Technologies Academy  
(Kevin Chung)

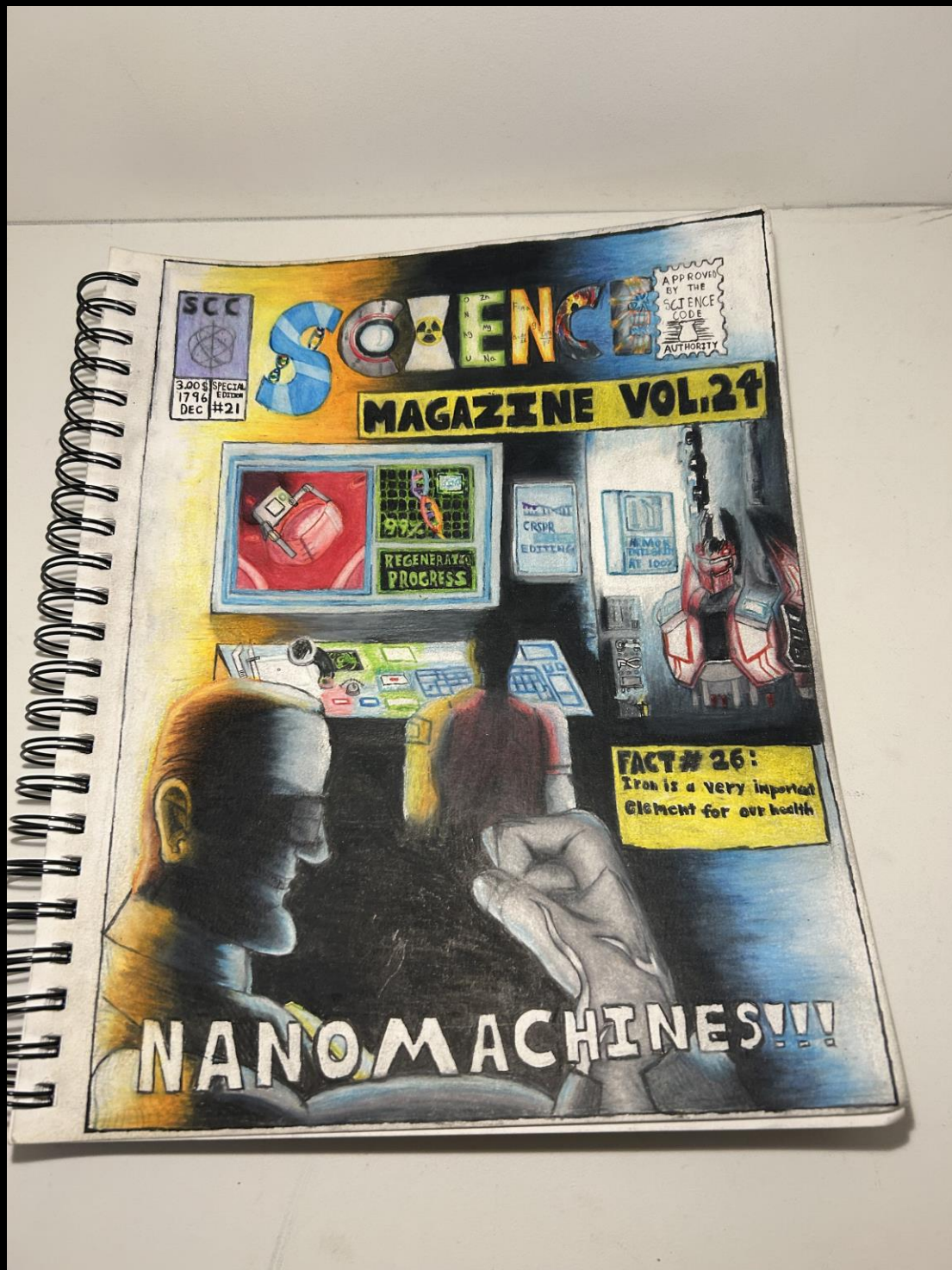
# Kimberly Garcia Hernandez

## The superhero vaccine



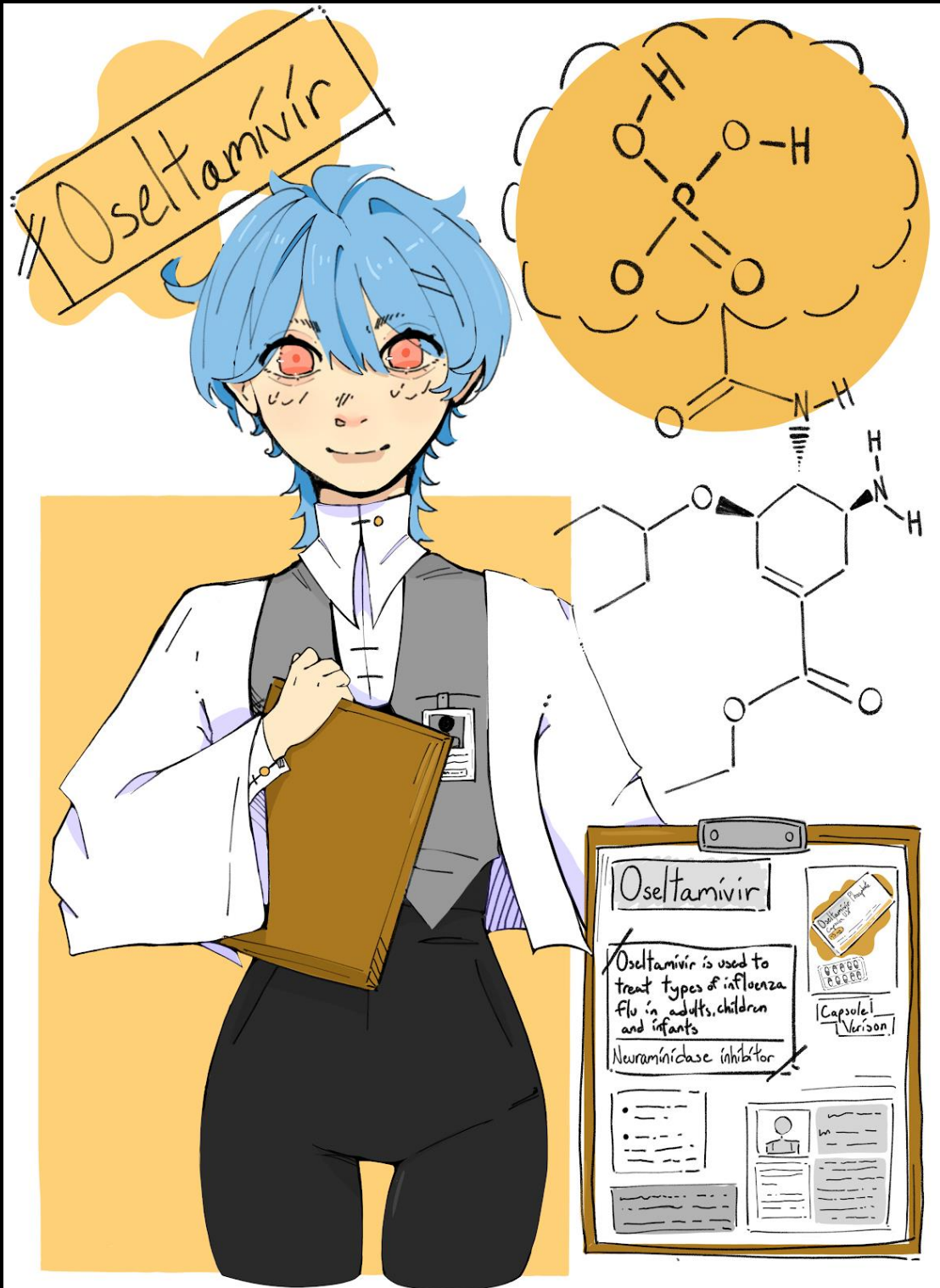
Advanced Technologies Academy  
(Edwin Cruz)

# Santiago Garcia Science Magazine #24



Advanced Technologies Academy  
(Kevin Chung)

# Kamilla Gonzalez Medicine to Heal

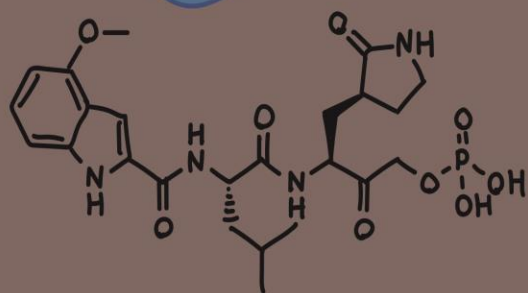


Advanced Technologies Academy  
(Edwin Cruz)

# Hua Jenna

## Fighting Disease with Vaccines

# Chemistry Heals!



Covid-19 Vaccine  
PF-07304814

Advanced Technologies Academy  
(Edwin Cruz)

Third Place

Kara Audlee

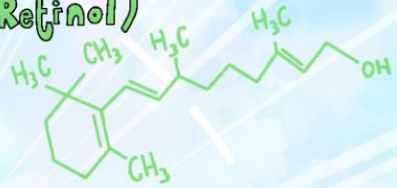
Advanced  
Technologies  
Academy  
(Kevin Chung)

# Vitamin

## A

Protects the eye's cornea and helps with normal vision.

(Retinol)

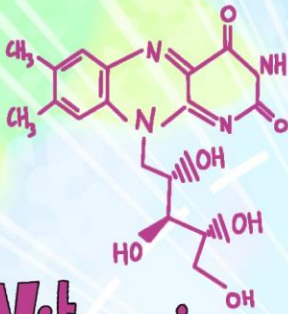


# Vitamin

## B2

Helps with metabolizing carbohydrates and fats.

(Riboflavin)



# Vitamin

## C

Helps with healing wounds.

(L-Ascorbic Acid)

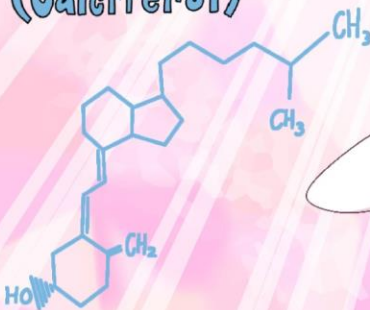


# Vitamin

## D

Helps the body absorb calcium, building stronger bones.

(Calciferol)

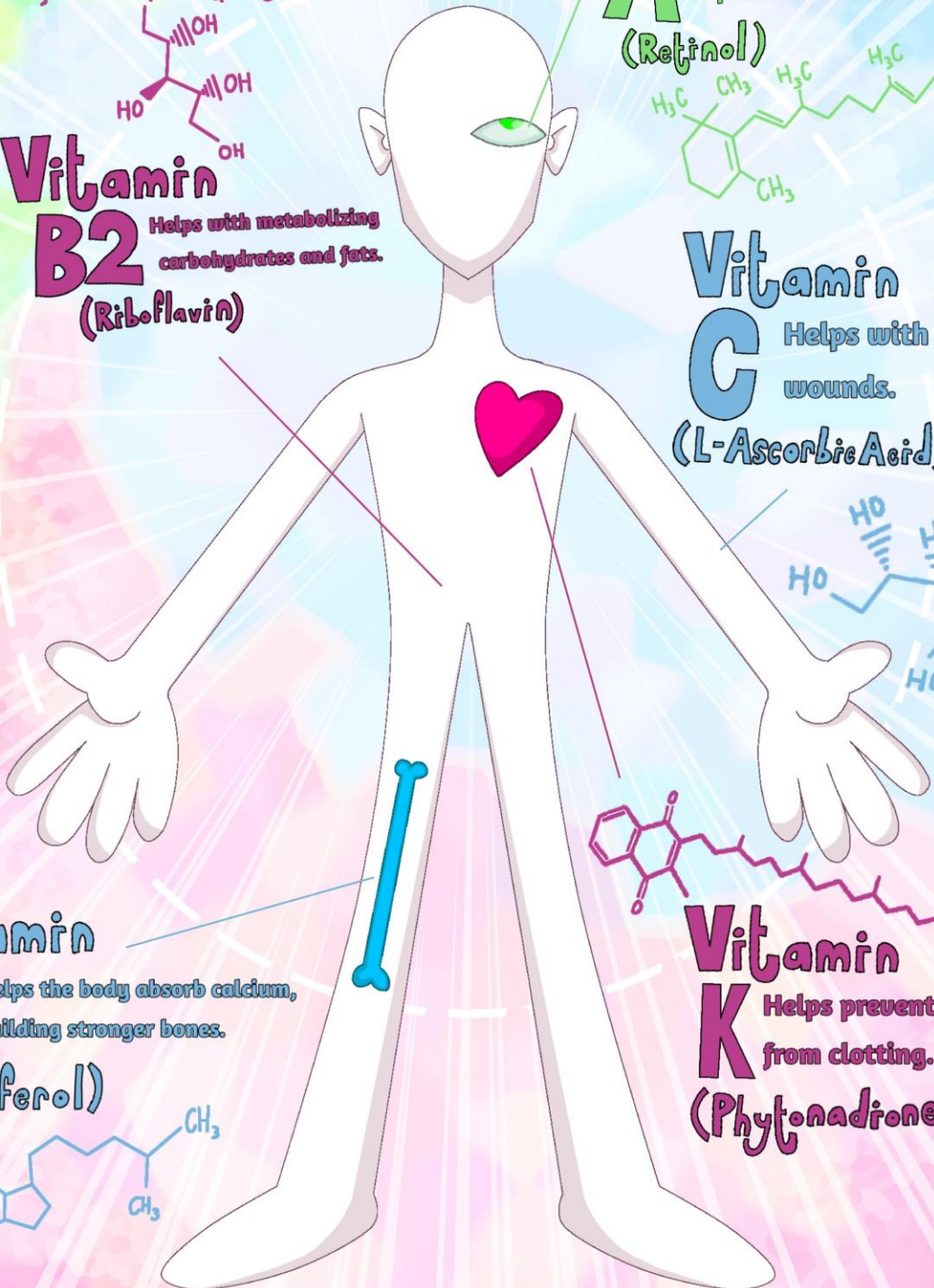


# Vitamin

## K

Helps prevent blood from clotting.

(Phytonadione)

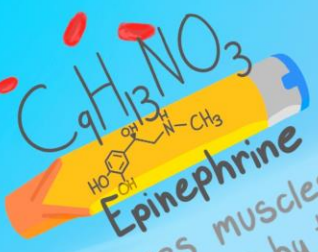




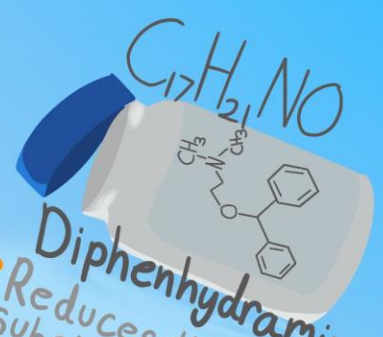
Second Place

Emma  
Kearney

Advanced  
Technologies  
Academy  
(Kevin Chung)

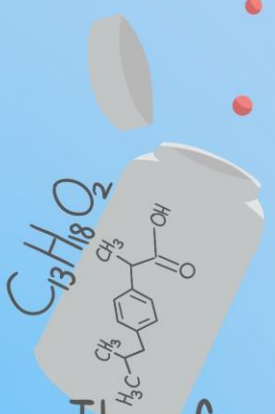


★ relaxes muscles in the airways by tightening blood vessels (used for extreme allergic reactions)

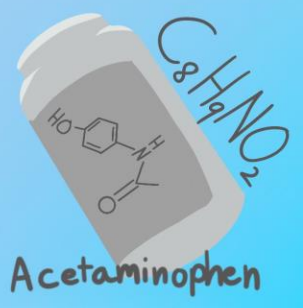


★ Reduces the action of a substance that causes sneezing, watery eyes, and a runny nose

# THE HEALING POWER OF CHEMISTRY



★ Stops the body's production of a substance that causes fever and pain



★ Reduces fever  
 ★ Moderate pain relief

The Power of Pills!

First Place

Chance

Belcher

Advanced

Technologies

Academy

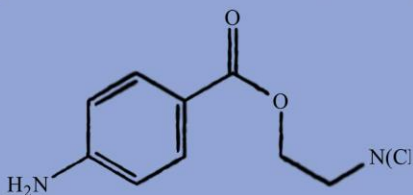
(Edwin Cruz Munoz)

# CHEMISTRY

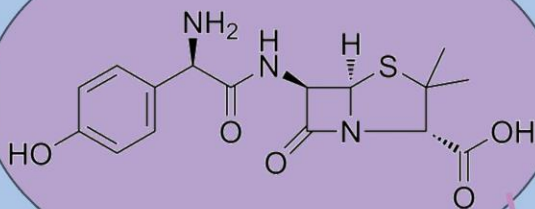
# HEALS

# ALL

## ANESTHESIA

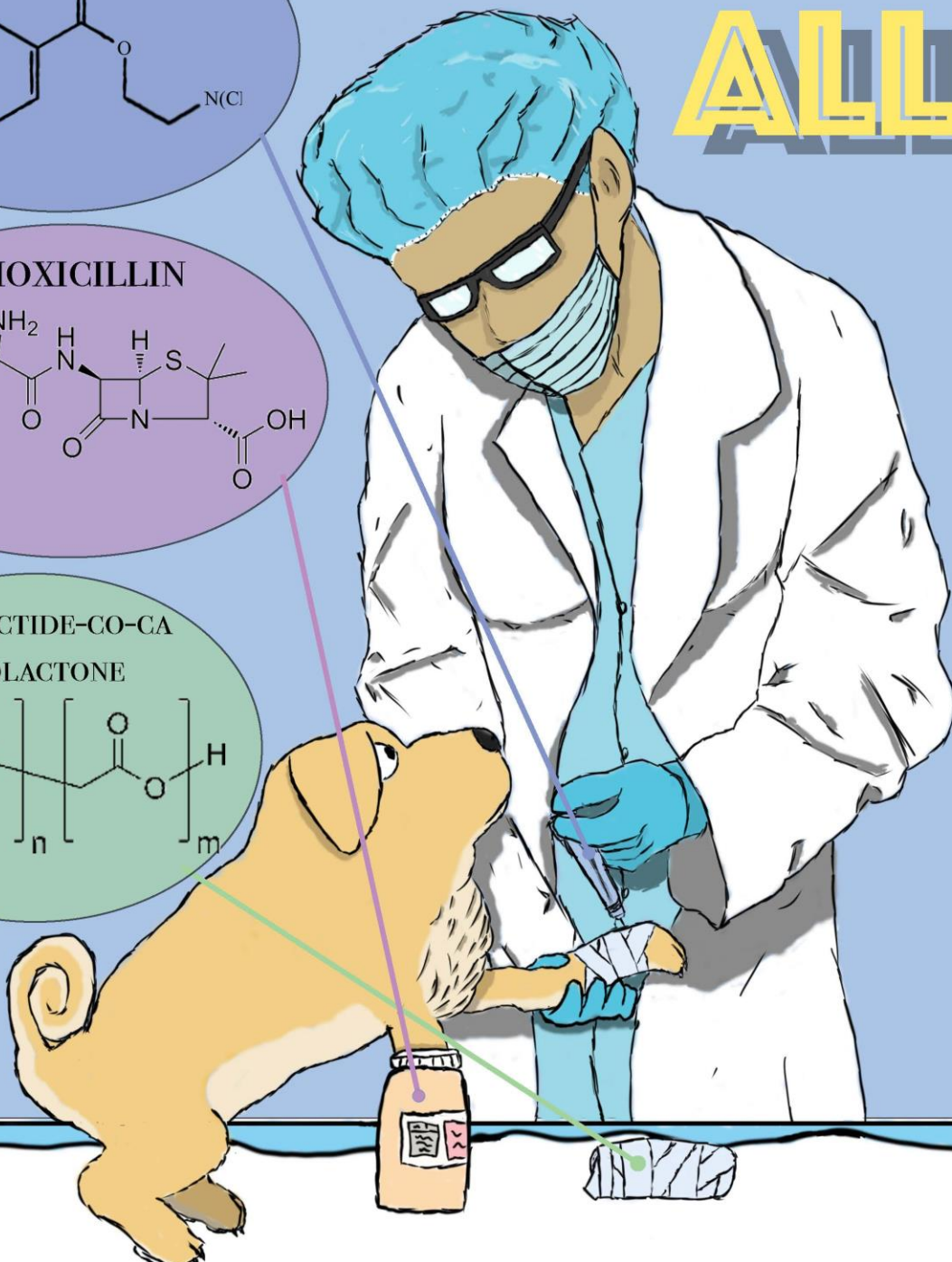
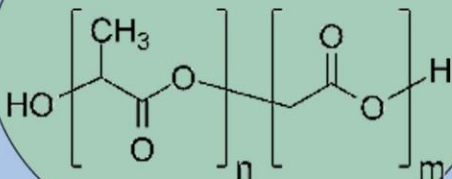


## AMOXICILLIN



## D,L-LACTIDE-CO-CA

## PROLACTONE



Chemistry Heals All

# Acknowledgements

- **CCSD School-Community Partnership Program – Jeniffer Calimbahin**
- **All the high school students and teachers at the Clark County School District who participated in this event**
- **Executive Committee of the Southern Nevada Section of the American Chemical Society**

# 2023 Southern Nevada Section Executive Committee:

- Chair – Rampur Viswanath
- Chair-Elect – Rampur Viswanath
- Immediate Past-Chair – Roger Rennels
- Treasurer – Kazumasa Lindley
- Secretary – Erica Marti
- Councilor – Kazumasa Lindley
- Alternate Councilor – Roger Rennels
- Member-at-Large – Jeremy Cho
- Member-at-Large – Anthony Harrington
- Western Regional Board Representative – Rampur Viswanath

# 2024 Southern Nevada Section Executive Committee:

- Chair – Rampur Viswanath
- Chair-Elect – David Ferrari
- Immediate Past-Chair – Rampur Viswanath
- Treasurer – Erica Marti
- Secretary – Julie Bertoia
- Councilor – Roger Rennels
- Alternate Councilor – Rampur Viswanath
- Member-at-Large – Anthony Harrington
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- Western Regional Board Representative – Rampur Viswanath

Thank you:

UNLV

and

The Marjorie  
Barrick Museum  
of Art

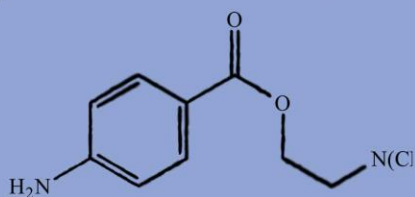


# CHEMISTRY

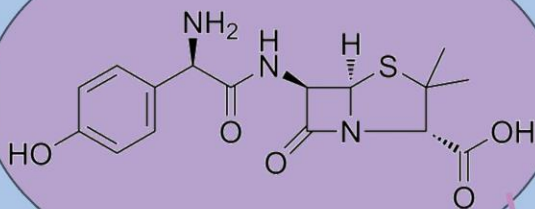
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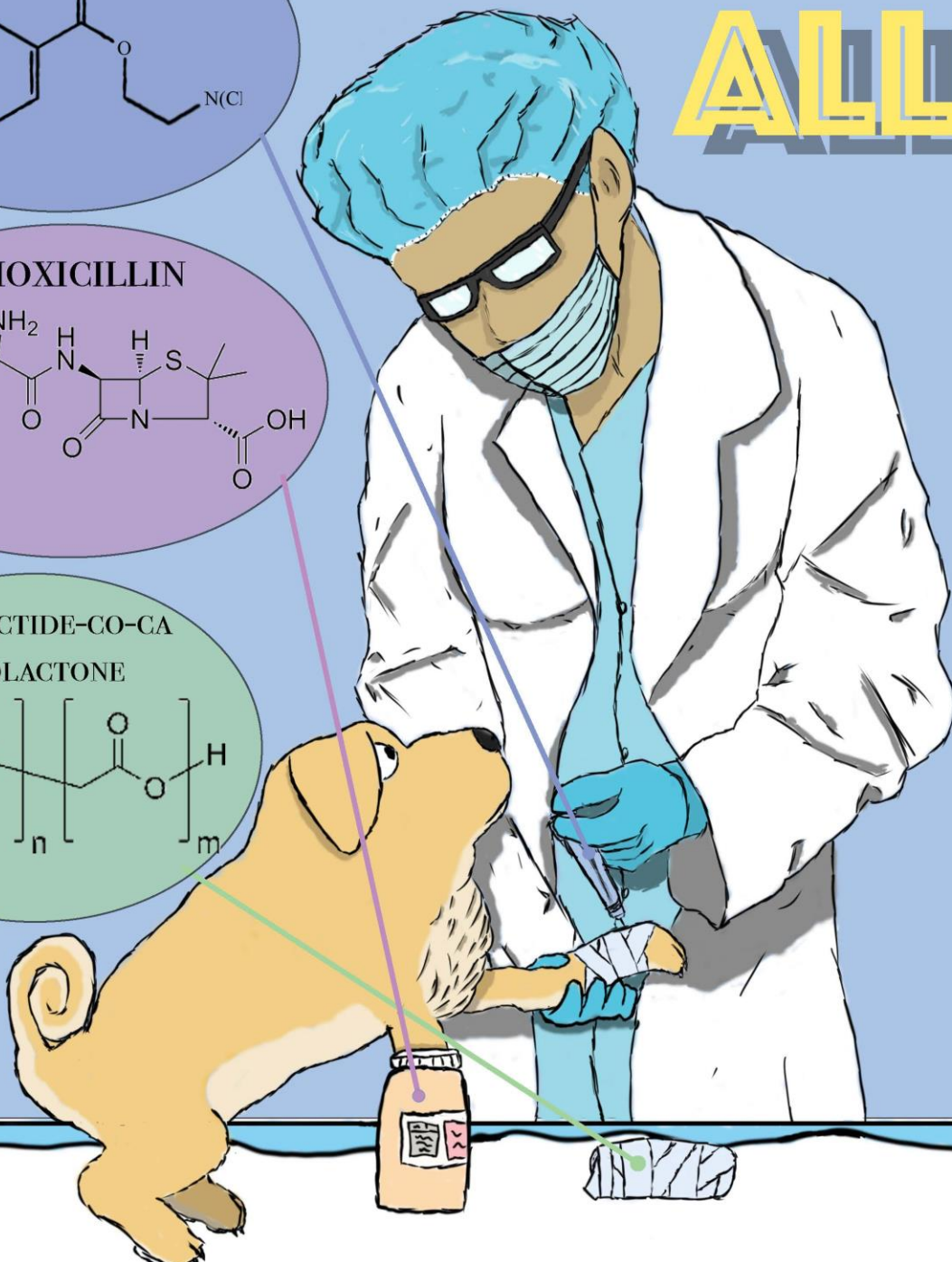
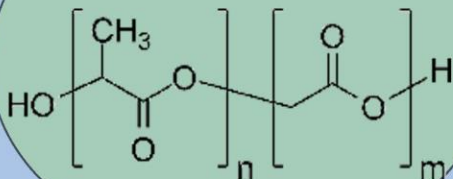


## AMOXICILLIN



## D,L-LACTIDE-CO-CA

## PROLACTONE



Chemistry Heals All