

Teen Commission Meeting  
January 8, 2025  
Presentations

Item #1  
Community Development  
Presentation

# COMMUNITY DEVELOPMENT PRESENTATION

Gian Paolo Martire  
Senior Planner

Teen Commission Meeting  
January 8, 2025



**CITY OF  
CUPERTINO**

# Community Development Department

- Planning Division
  - Land Use
  - Development Review
  - Municipal Code Chapters 14,17, 18, & 19
  - General Plan, various Specific Plans
- Building Division
  - Plan Review – Building Code
  - Inspections
- Code Enforcement
  - Focus on violations of Zoning and Building Codes
- Housing
  - Manages City's Below Market Rate Programming
- VIDEO

# Major Projects

- Westport Cupertino
- VALLCO
- The Hamptons
- Marina Plaza
- Cupertino Village Hotel
- De Anza Hotel
- VP1
- Coach House (1655 S. De Anza)
- Housing Element

# Westport



# VALLCO/The Rise



# The Hamptons





# Marina Plaza





# Cupertino Village Hotel



# De Anza Hotel



# VP1-Apple Vallco Parkway





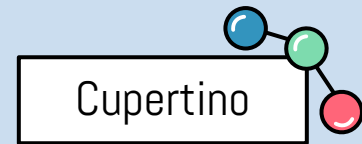
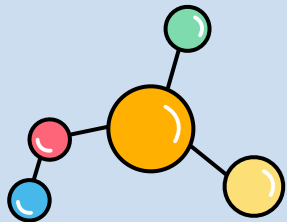
# Coach House – 1655 S. De Anza



Teen Commission Meeting  
January 8, 2025  
Presentations

Item #2

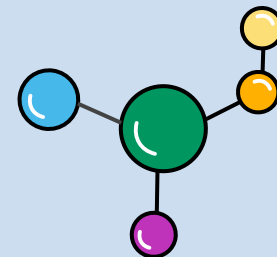
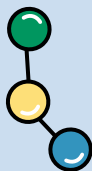
Youth Led Organization,  
UpNext Scientists



Cupertino

# Up Next Scientists Presents: Intro to UNS

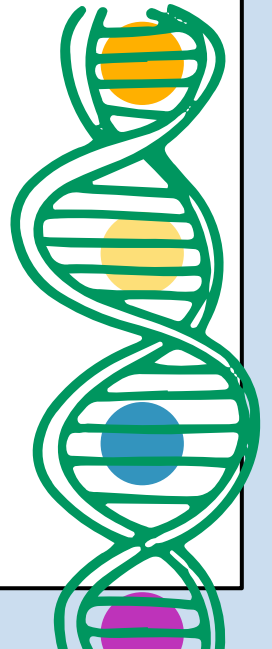
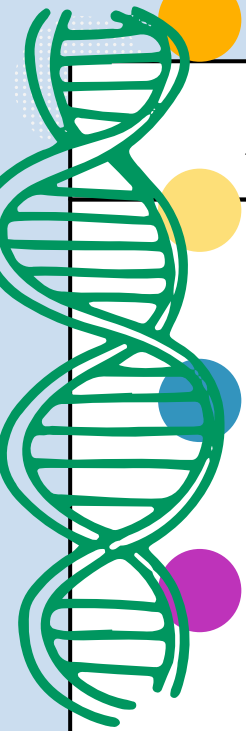
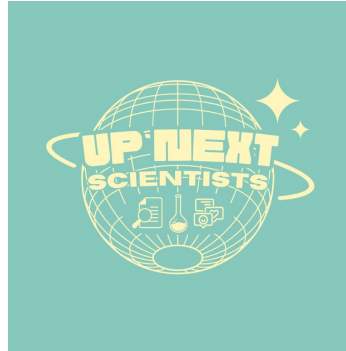
Dhruti Halambi, Executive Director





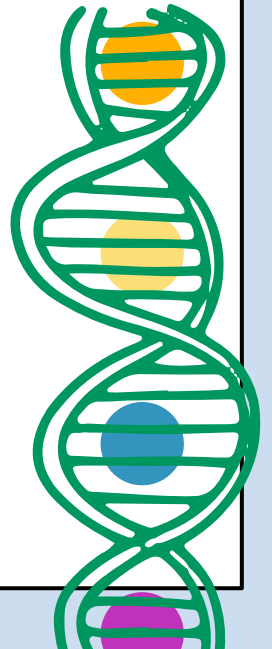
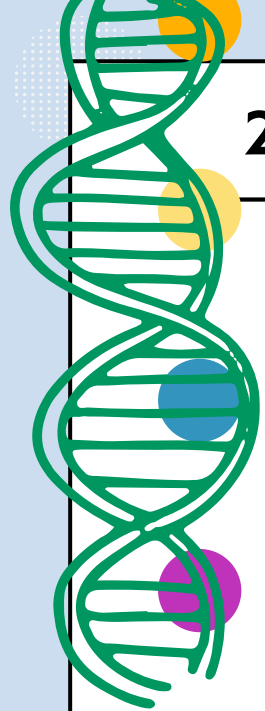
## 2a. Who Are We?

UpNext Scientists is a 501(c)(3) non-profit virtual organization created in 2023 by a high school student who realized the prevalence of access barriers within enrichment opportunities. To combat this, we provide middle, high school, and undergraduate students with **free, virtual, and no-cut research opportunities that stress creativity and understanding.**



## 2b. What Is Our Mission?

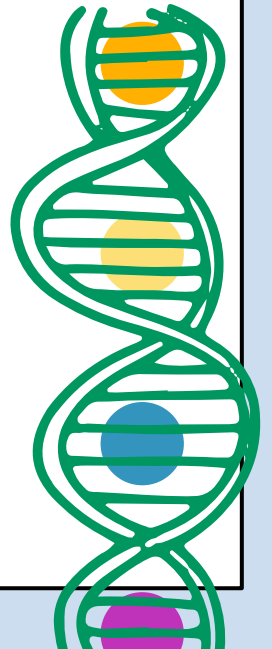
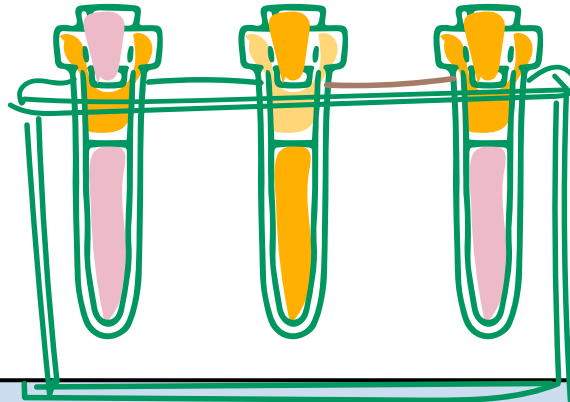
Up Next Scientists, a student-driven initiative, aims to revolutionize STEM education, offering students from diverse backgrounds a **platform to refine their skills in crafting compelling research articles across Science, Technology, Engineering, and Mathematics.** By embracing innovation and inclusivity, we aim to bridge educational gaps and empower students to shape the forefront of scientific exploration actively.





## 2c. What Is Our Vision?

To Provide teens worldwide interested in health and science careers with essential practical experience, and to **inspire and nurture the next generation of scientists** to shape the future of scientific exploration.



# FOUNDING BOARD OF DIRECTORS

## EXECUTIVE DIRECTOR

Dhruti Halambi

Role: Oversees all projects, ensures goals are met, coordinates collaborations, and supports board members as needed.



## VICE EXECUTIVE DIRECTORS

Haasini Gathaatharan & Nikki Dash

Role: Research and establish 501(c)(3) nonprofit status, develop projects with HR, coordinate bi-weekly check-ins with the board, and manage funds as needed.



## DIRECTOR OF HUMAN RESOURCES

Neel Kashi

Role: Manage communications (Discord, Classroom), send monthly newsletters, promote UNS, and help plan biweekly board meetings with updates and bonding activities.



## DIRECTOR OF TECHNOLOGY

Malaika Yasir

Role: Create, organize, update, and manage the UNS website, and collaborate with the Director of Literary Research to publish content.



# FOUNDING BOARD OF DIRECTORS

## DIRECTOR OF FINANCE

Ananya Choubey

Role: Manage GoFundMe, collaborate on fundraising campaigns, secure sponsorships, and apply for scholarships, contests, and grants.



## DIRECTOR OF LITERARY RESEARCH

Nithi Chandran

Role: Plan and execute programs (CIR), create lesson plans, review research for publishing, and collaborate with the Literary Research Board to ensure an inclusive environment.



## DIRECTOR OF VISUAL RESEARCH

Elva Mou

Role: Plan and execute programs (CIR), create lesson plans, review research posts for publishing, and collaborate with the Visual Research Board to maintain an inclusive environment.



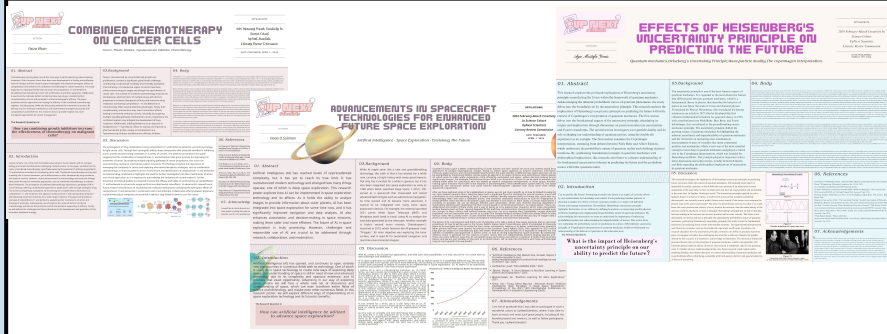
## DIRECTOR OF OUTREACH

Annabelle Siow

Role: Collaborate with the Outreach Board to create social media content, manage email outreach, recruit members, and update documents.

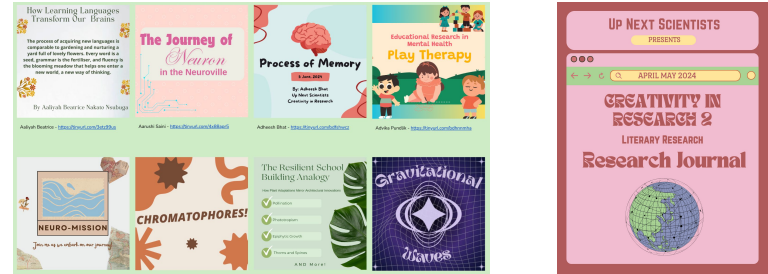


# Our Program: Creativity in Research



**CIR1**

Our first cohort, with over 50 members, produced Literary Review Research posters from topics ranging from "The Effects of Robotic Assistance in Surgeries" to "The Effects of Heisenberg's Uncertainty Principle on Predicting the Future!"



**CIR2**

With over 100 participants, CIR2 cohort members attended 6 sessions where they were taught how to analyze STEAM experiments and convert STEAM procedures into analogies using social media posts! Find the Research Journal and the Posts on our Website!

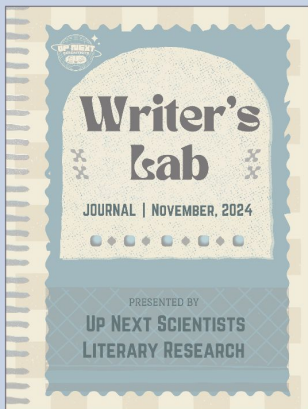


# WRITERS' LAB (SEP-NOV)

## PROGRAM DESCRIPTION

This six-week, free, and highly selective virtual program provided participants with personalized mentorship and comprehensive guidance in writing scientific papers. Through on-demand lessons, students learned to research and write various types of scientific papers, including Literature Reviews, Meta-Analyses, and Hypothetical Research Papers.

Each week, participants engaged in one-on-one mentoring sessions with experienced members of the UNS Literary Research Commission, ensuring tailored support and feedback. By the end of the program, their work was published on the UpNext Scientists' website and shared across platforms such as Instagram and LinkedIn. Additionally, participants received assistance in submitting their work to peer-reviewed journals for broader academic recognition.



The image shows a presentation slide for Denith Mayon. On the left is a portrait of Denith Mayon, a man with dark hair wearing a white shirt and a blue tie. To the right of the portrait is a slide titled "From Mechanisms to Management: Understanding and Addressing Antibiotic Resistance in Bacteria". The slide contains a bulleted list of topics: "Mechanisms: Drug efflux, Target modification, Drug inactivation and Limiting drug uptake", "Natural and Acquired resistance (Mutation and Horizontal gene transfer)", "Gram-negative and Gram-positive bacteria", "5 common mode of actions of antibiotics", and "6 ways to combat Antibiotic resistance". Below the text is a diagram showing a bacterium with various mechanisms of antibiotic resistance, including drug efflux pumps, target modification, and drug inactivation. The diagram is colorful and includes labels for different parts of the bacterium and the resistance mechanisms.

Denith's Presentation

# VISUAL LAB QUEST (NOV-DEC)

## PROGRAM DESCRIPTION

This five-week, virtual program offered students an exceptional opportunity to explore research, scientific presentations, and public speaking. Participants competed with an international group of peers while enhancing their STEAM skills through personalized academic mentoring and guided support. Each week, students refined their research and presentation abilities, gaining confidence and expertise in effectively communicating their ideas. By the end of the program, participants' work was showcased on the UpNext Scientists' website and promoted across platforms like Instagram and LinkedIn to highlight their achievements.

Winning teams were awarded cash prizes, certificates of completion, and personalized recommendation letters. All participants gained essential skills, publication opportunities, and academic recognition, equipping them with a strong foundation to excel as future UpNext Scientists while preparing for broader success in their academic and professional journeys.

WEEK	TOPIC	DESCRIPTION
1	Introduction & Topic Selection	Meet your group, learn about the program, and choose your research topic.
2	Research Skills Workshop	Learn how to conduct thorough research for the competition.
3	Presentation Development	Transfer research into a visually appealing presentation of your choice.
4	Peer Review & Final Submission	Receive peer critiques and submit your final draft for evaluation.
5	Presentations & Winner Announcement	Present your project to the panel and find out the winning teams!



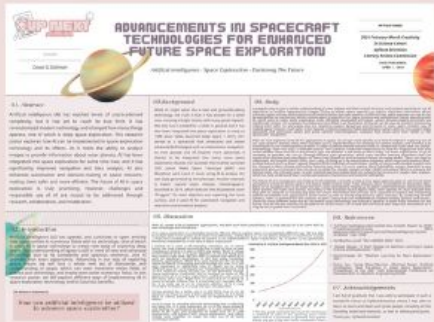
Marwa Lazaar

## Millikan's Oil Drop Experiment

abstract

Building upon the discovery of the electron, the Millikan oil drop experiment provided evidence for the quantization of electric charge and a precise value for the elementary charge through measuring the motion of charged oil droplets in an electric field. This experiment's findings substantiated later the core principle of the structure of atoms in Bohr's model and led to new areas of research. However, the study faced some limitations due to outdated measurements and potential data selection bias....

Find the full article in our **CIR2 Journal!**

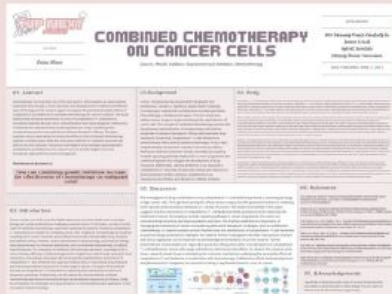


HOW CAN ARTIFICIAL INTELLIGENCE BE UTILIZED TO ADVANCE SPACE EXPLORATION?

Artificial Intelligence - Space Exploration - Envisioning The Future

BY DOAA O.SOLIMAN

UPNEXT SCIENTISTS



HOW CAN COMBINING GROWTH INHIBITORS INCREASE THE EFFECTIVENESS OF CHEMOTHERAPY ON MALIGNANT CELLS?

Cancer - Mitotic Inhibitor - Topoisomerase Inhibitor - Chemotherapy

BY FAIZA KHAN

UPNEXT SCIENTISTS

## Arish Padani Stanford Prison Experiment

abstract

American prisons have a long history of violent conditions. In 2018, 4,135 state prisoners died and an additional 378 federal prisoners died in facilities operated by the Federal Bureau of Prisons, or the BOP. Due to this phenomenon, it is only natural to ask what is responsible for the alleged brutality and violence in American prisons- is it the nature of the prison population (presumably filled with sociopathic criminals and sadistic guards), or is it the social psychological environment of the prison experience?...

Find the full article in our **CIR2 Journal!**

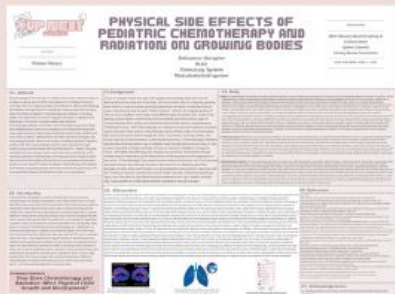
Doaa O. Soliman

## Understanding Quantum Entanglement: A Mysterious Scientific Phenomenon

abstract

In this article, we will take on the journey of exploring the complex concept of quantum entanglement. We will explore what it means exactly, which experiments served to prove it, how it can be used currently and in the future, what limitations we might face, and much more. We will be particularly exploring three scientists, John Clauser, Alain Aspect, and Anton Zeilinger, and their experiments related to quantum entanglement....

Find the full article in our **CIR2 Journal!**



HOW DOES CHEMOTHERAPY AND RADIATION AFFECT PHYSICAL CHILD GROWTH AND DEVELOPMENT?

Anticancer therapies - Brain - Pulmonary System - Musculoskeletal system

BY PRANAVI KARUVU

UPNEXT SCIENTISTS



Scientists

UPNEXT

CIR work sample

UP NEXT SCIENTISTS

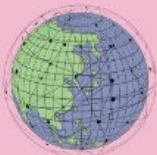
PRESENTS

APRIL MAY 2024

# CREATIVITY IN RESEARCH 2

LITERARY RESEARCH

## Research Journal



# CREATIVITY IN RESEARCH 2



## KEY TIPS



**Know Your Audience:**  
Understand who your target audience is, including their demographics, interests, and preferences. Tailor it accordingly.



**Use Images:**

- Clear images (quality)
- Eye catching
- Infographic images



**Captions:**

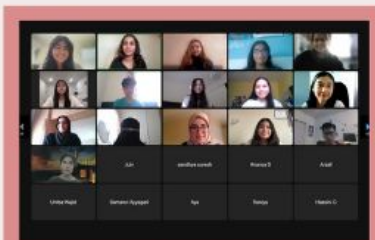
- Mention the topic
- Can start off with something that will pique their interest
- Question...
- Humor...



**Encourage Engagement:**  
Prompt your audience to engage with your content by asking questions, running polls, etc.



# creativity in research I



recap

Stay Scienced!

Contact Information:

Email: [upnextscientists@gmail.com](mailto:upnextscientists@gmail.com)

Instagram: [@upnextscientists](https://www.instagram.com/upnextscientists)

LinkedIn: [linkedin.com/company/up-next-scientists](https://www.linkedin.com/company/up-next-scientists)

CR 2 & R Journal

Up Next Scientists Presents:  
Methods and Materials





## What we have done so far...

- Achieved 501(c)(3) nonprofit status
- Hired 20 board members
- Reached 1k+ students in 50+ countries
- Published 100+ papers and 50+ research posters
- Raised over \$1000 for funding
- Hosted 3 Creativity in Research Programs and
- 1 Writer's Lab and 1 Visual Lab Quest



## What we will be doing in the future

- Continuing previous light academic scientific literacy programs (1 per quarter)
  - Creativity in Research, Writers Lab, etc
- Hosting in-person article writing bootcamps (1 per year)
- Getting IRB approval to conduct statistical experiment, teach students how to analyze + draw conclusions from obtained data

**[instagram.com/upnextscientists/](https://www.instagram.com/upnextscientists/)**

Our Instagram

**[directors@upnextscientists.org](mailto:directors@upnextscientists.org)**

Our email

**[upnextscientists.org](https://www.upnextscientists.org)**

Our Website



**Questions?**

Thank you for listening!



Teen Commission Meeting  
January 8, 2025  
Presentations

Item #4

UpNext Scientists for Teen  
Commission Highlight  
Program

# Parks and Recreation Department Evaluation of Youth Led Organization for Highlight

January 8, 2025

Teen Commission



**CUPERTINO**

# Agenda

- Review Youth Led Organization Application
- Consider Youth Led Organization for Highlight spot by Teen Commission

# Reminder of the Questions to Answer

- What is your YLO's goals?
- What do you want to achieve?
- What are your plans to increase engagement in the future?
- What are the plans for the YLO after you graduate from high school?
- Do you have a plan for the longevity of the organization?
- Why do they want the YLO highlight?
- What is the organization's impact on Cupertino?
- What made them want to start the YLO?

# Organization

- Up Next Scientists
- Contact: Dhruvi Halambi
- Website:  
<https://sites.google.com/JISEDU.OR.ID/UPNEXTSCIENTIST>
- Instagram:  
<https://www.instagram.com/upnextscientists>
- LinkedIn:  
[linkedin.com/company/up-next-scientists](https://www.linkedin.com/company/up-next-scientists)

# How Many Events?

- 2 big programs



# What Does the Organization Do?

- UpNext Scientists is a virtual organization created in 2023 by a high school student that realized the prevalence of access barriers within enrichment opportunities. In order to combat this, we provide middle, high school, and undergraduate students with free, virtual, and no-cut research opportunities that stress creativity and understanding.

## How Does the Organization Engage Participants?

- Basically we host 6 week long cohorts which teach members how to write literature in STEAM. In the past we have taught members how to create research posters, research articles, social media posts, etc.

## What are the Plans for the After Graduation?

- We have a strong founding board of over 20 members, and we will pass it on to the younger members of the board once the primary members graduate. Also, we take in new hires from each cohort as well.

# What Makes the Organization Unique?

- The fact that we operate on a \$0 budget (as of now), and address a niche gap in literacy education (STEM writing) with intense focus.

## Why should Teen Commission Highlight the Organization?

- I think that the Teen Commission should highlight our organization because a lot of the teens in Cupertino look for summer opportunities / research opportunities, given the fast paced, academically competitive environment we live in.



## Why should Teen Commission Highlight the Organization? (Continued)

- Especially for the younger teens, they find that they do not have a lot of experience heading into these summer programs, and therefore, they would benefit a lot from the services of our nonprofit, which would provide them with the base skills that they need to succeed in other, more prestigious programs in their future.

# Questions?



CUPERTINO