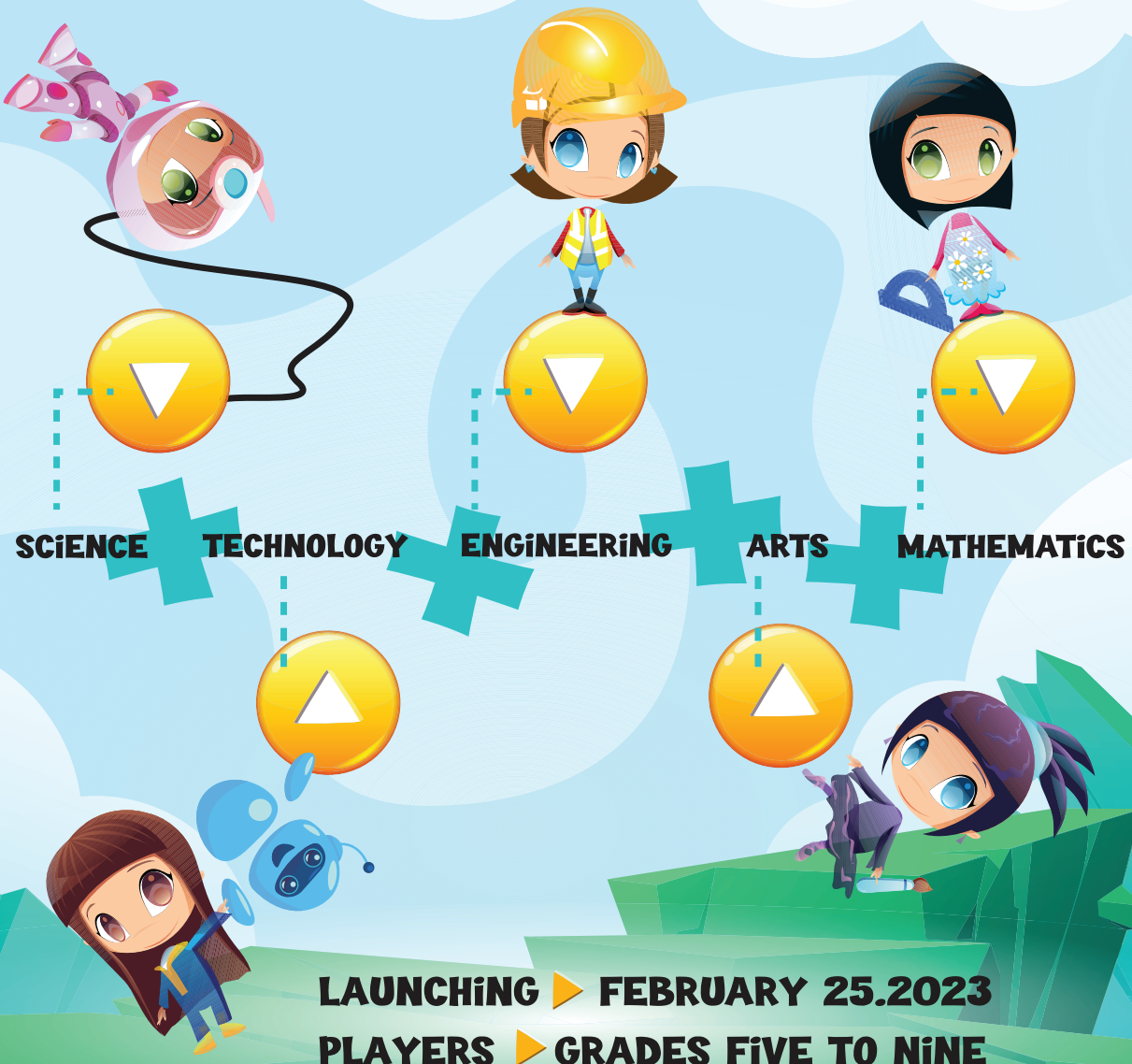


SACRED HEARTS ACADEMY



SCIENCE symposium+

FOR GIRLS



LAUNCHING ► FEBRUARY 25.2023
PLAYERS ► GRADES FIVE TO NINE

POWERED BY MO'OLELO STUDIOS
+ SOROPTIMIST INTERNATIONAL OF WAIKIKI
THE SACRED HEARTS PARENT ORGANIZATION



START ►

GLIMPSE INTO THE SCIENCE SYMPOSIUM+

Sponsored by **SACRED HEARTS ACADEMY**, the **SCIENCE SYMPOSIUM + FOR GIRLS** is a free program which focuses on the areas of **SCIENCE, TECHNOLOGY, ENGINEERING, THE ARTS AND MATHEMATICS (STEAM)**.

Expertise in **STEAM** fields promotes career inventiveness, scientific discovery and efficiency in the ways things are done, while also opening up new job and economic opportunities.

Current research shows that **STEAM** careers in the United States in the past 10 years have grown at three times the pace of non- **STEAM** professions. Through the next decade, these are projected to continue growing at this pace.

It is imperative that girls develop an interest in these fields from an early age in order to take advantage of the higher education and career opportunities available to them.

HIGHLIGHTS OF THE DAY'S HAPPENINGS

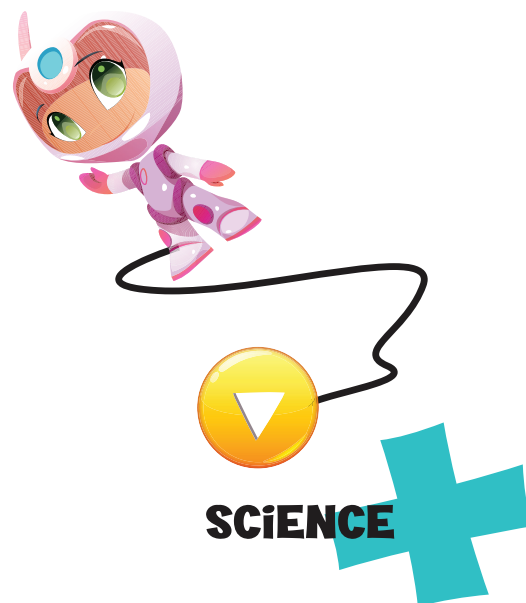
Students attend an opening keynote session with their parents followed by two 60-minute workshops of their choosing. These sessions, taught by experts in the fields of **SCIENCE, TECHNOLOGY, ENGINEERING, THE ARTS AND MATHEMATICS (STEAM)**, will include a variety of fun and engaging hands-on activities.

INSIGHT SHARED WITH PARENTS

When students are in their workshops, parents will participate in a sessions with two experts in their fields – **VAPING** with **SUN CHOI** of the *American Lung Association* and **INTERNET SAFETY** with **ANGELA KAIWIKUAMOOHOIHO**, a community and crime prevention specialist with the *Department of the Attorney General*.

GLIMPSE INTO THE DAY

7:45 – 8:15 a.m.	REGISTRATION
8:30 – 9:00 a.m.	KEYNOTE ADDRESS (<i>Suzanne Vares-Lum</i>)
9:00 – 9:20 a.m.	BREAK (<i>refreshments for students</i>)
9:00 – 10:00 a.m.	FOR PARENTS ONLY ADDRESS
9:30 – 10:30 a.m.	STUDENT WORKSHOP SESSION I
10:00 – 10:20 a.m.	BREAK (<i>refreshments for parents</i>)
10:20 – 11:00 a.m.	PARENT SESSION I
10:40 – 11:40 a.m.	STUDENT WORKSHOP SESSION II
11:00 – 11:40 a.m.	PARENT SESSION II



EXPERTISE SHARED DURING THE KEYNOTE

This year's **SYMPOSIUM** + keynote speaker is **SUZANNE PUANANI VARES-LUM**, president of the *East-West Center* since January 2022. This was a ground-breaking occasion since Vares-Lum is the first woman and Native Hawai'ian to be chosen for the role at the Center.

Prior to joining the *Center*, she amassed several decades of executive leadership and planning experience which culminated in five years servicing and advising senior officials at the United States Indo-Pacific Command and developed relations with nations throughout this region.

A retired Major General with 34 years of service, Vares-Lum also held key roles addressing national security challenges in the region. She leveraged the knowledge gained throughout her career to establish Indo-Pacific Consulting LLC to provide consulting and advise on regional issues. In addition, she is an advocate for regional issues and leadership and mentorship - especially for women, peace and security.

As a community leader, Vares-Lum serves on a number of non-profit Boards, including the American Red Cross Pacific Islands Region. She also has served on various committees that promote Hawai'i's economic diversification, workforce development and discussions regarding the State's land and water.

Vares-Lum earned a Bachelor's Degree in Journalism and a Master's Degree in Education from the University of Hawai'i. Then, she gained another Master's Degree from the United States Army War College, this one focused on Strategic Studies. Her education also includes a National Security Fellow of the Maxwell School of Citizenship and Public Affairs at Syracuse University, and she is an alumna of the Daniel K. Inouye Asia-Pacific Center for Security Studies.



EAST-WEST
CENTER

PARTNERS FOR THIS YEAR'S SCIENCE SYMPOSIUM +

MO'OLELO STUDIOS (TITLE SPONSOR)



SACRED HEARTS
ACADEMY
PARENT ORGANIZATION

SOROPTIMIST
INTERNATIONAL OF
WAIKIKI



TECHNOLOGY

ENGINEERING

ARTS

MATHEMATICS

STUDENT WORKSHOPS

(Students attend an opening keynote session by Suzanne Puanani Vares-Lum with their parents followed by two workshops of their choosing. (Options and descriptions follow) When students are in their workshops, parents will participate in a session with Internet safety and vaping experts.)

#1

WORKSHOP #1 – BEYOND BEST FRIENDS, DOGS SAVE LIVES!

Know any dog lovers? Besides being a best friend, they can do some pretty amazing things – like helping those with disabilities! They can even save the lives of the blind and those with diabetes. Participants, and dog lovers, will learn more about how to become a part of this special process.

VICKIE KENNEDY, ACADEMY ALUMNA

(Blind since 2000, Kennedy has held leadership positions with the Hawai'i Association of the Blind, Guide Dogs for the Blind and the Northern California Affiliate of the Foundation Fighting Blindness)

#2

WORKSHOP #2 – BRIDGE THE GAP AND BUILD A BRIDGE

Wonder how that huge bridge is built? Discuss basic principles of different bridge designs and how these intricate structures distribute loads through specific points using a combination of pulling forces – tension – and pushing forces – compression. Then, become part of an “engineering team” to apply what is learned to use various materials to build an actual bridge that will hold a cup of 100 pennies without falling over!

SHANNON KIM,

ELEMENTARY AND HIGH SCHOOL TEACHER

#3

WORKSHOP #3 – CONCOCTING CREATIVE CODING

(Double-session-participants register for #3a and #3b)

Like using computers? Enjoy engaging in fun and creative expression? If so, this double-session workshop is the perfect activity! Learn how to use simple drag and drop coding to design animations and invent games.

DAWN ROBERTSON, SCIENCE TEACHER
| SACRED HEARTS ACADEMY

#4

WORKSHOP #4 – DON'T WATER IT DOWN!

During this invigorating session, participants will explore two critical parts of Hawai'i's environment – watersheds and coral reefs. First, learn all about watersheds – what they are, why they are important and how pollution from humans can negatively impact the water sources relied on by Island residents. A mini-watershed model also be built.

Next, the focus shifts to how watershed pollution flows down into coral reefs. Participants will become scientists and explore about the threats to coral and how to survey and monitor the health of these reefs.

LAURA BAILES, EDUCATION AND OUTREACH
COORDINATOR | MALAMA MAUNALUA

MADELEINE SHERMAN, PROJECT MANAGER
AND MAILE VILLABLANCA, OUTREACH
ASSOCIATE | CORAL RESILIENCE LAB AT THE
HAWAII INSTITUTE OF MARINE BIOLOGY

#5

WORKSHOP #5 – EXPLORE THE WORLD OF VETERINARY MEDICINE

Pets are like people! They have physical ailments and concerns which impact their daily lives. Participants will explore how veterinarians perform a physical exam on pets – using a dog. They will also discover how radiographs, or x-rays, and other tests – similar to those done on humans – are used to diagnose a broad spectrum of health issues.

DR. KATIE NAKAMURA, VETERINARIAN
| KING STREET PET HOSPITAL



WORKSHOP #6 – FIRE IT UP!

Self-expression will be encouraged during this ceramics workshop session, resulting in the creation of two plates. Participants will learn the slab technique and under-glazing to create the first plate, a beautiful leaf platter. For the second slab project, glaze transfers will be used to create a functional plate that can be used when eating. The two finished products can be picked-up from the Academy in two weeks.

KAYCIE BALTUNADO, FINE ARTS TEACHER
| SACRED HEARTS ACADEMY



WORKSHOP #7 – FLY THE FRIENDLY SKIES-HOW DO CHICKENS REALLY FLY?

When eating a chicken wing, it is not meat that is being consumed but actually the chicken's muscles. In this session, participants will get first-hand facts while dissecting – not eating! – a chicken wing. During this process, they will observe how muscles and bones work together to produce movement and allow chickens to fly!

LAURA HOUSMAN, SCIENCE TEACHER
| SACRED HEARTS ACADEMY



WORKSHOP #8 – FOR FOODIES –FOOD 101

Fascinated by food? Uncover some of the basics of the industry by identifying food profiles – including sweet, sour, salty, bitter and umami – and exploring how chefs “balance taste” in a restaurant. Also learn all about emulsions and salad dressings that will be taste-tested in class and can be made at home!

JON MATSUBARA, EXECUTIVE CHEF AND OWNER
| FEAST RESTAURANT



WORKSHOP #9 – GAME ON! IMPROVE ATHLETIC PERFORMANCE

Want to improve athletic performance? Integrate technology into regular sports routines using Dartfish, an iPad App to quickly identify areas of improvement and review. This App allows athletes to record video for analysis – including reviewing action in slow-motion, zooming into the video, breaking down motion into still shots and adding drawing, voice or text notes and comments.

CYRIL PIRES, TRACK COACH AND REGISTRAR
| SACRED HEARTS ACADEMY



WORKSHOP #10 – IT’S TIME TO MAKE SLIME!

Learn about equivalent ratios and graphing while making SLIME! Participants will use equivalent ratios to create the perfect SLIME recipe and graph the relationship between the amounts of each ingredient. It promises to add up so some ooey-gooley fun!

CAITRIN HOLOHAN AND SOPHIE CHENG,
MATHEMATICS TEACHERS
| SACRED HEARTS ACADEMY



TECHNOLOGY

ENGINEERING

ARTS

MATHEMATICS

#11

WORKSHOP #11 - LEARN THE CONNECTION OF SCIENCE + ICE CREAM!

Who would have thought that science is mainly responsible for the delicate and mesmerizing nature of ice cream! Ultimately, some chemistry combinations will help participants find a quick and easy way to make ice cream that is tasty and can even be made at home!

ERIN AWAI, GENERAL MANAGER
| SODEXO HAWAII

#12

WORKSHOP #12 - MAKE MICHELANGELO PROUD - COMBINE CREATIVITY PLUS COMPUTERS

This engaging session will utilize the Procreate App on an iPad. Participants will use iPads to create digital compositions and memes using layers, masks and blending modes, as well as brushes, blenders and text. No prior experience with digital drawing is required – just creative thoughts! iPads will be provided.

DAVID RANDALL, VISUAL ARTS TEACHER
| SACRED HEARTS ACADEMY

#13

WORKSHOP #13 - READY TO WEAR ART?

Who knew art and mathematics blend to make wearable fashion? An immersive experience, participants will delve into the basics of textile design, including design and production. Explore the critical role textile design plays in creating the clothes people wear. Aspiring designers will use a combination of art and mathematics to create a simple repeating pattern of their very own!

RACHEL ALENCASTRE ARROYO, TEXTILE ARTIST
| TORI RICHARD

#14

WORKSHOP #14 - ROBOTICS GOES FIRST!

(Double-session-participants register for #14a and #14b)

This double-session workshop is ideal for aspiring robotics engineers and programmers - little or no experience needed! Participants will enjoy a fast paced, real-scale recreation of the annual FIRST Robotics Challenge (FRC). Experience the exciting rigor of a highly-collaborative environment where attendees will need to problem-solve under time constraints to meet the robotics objectives required to complete the Challenge.

KYLEE MACLEAN AND JAMES BELL
SCIENCE TEACHERS | SACRED HEARTS ACADEMY

#15

WORKSHOP #15 - SHINE A LIGHT ON IT

It's invisible, but participants in this enlightening session will SEE! Put ultraviolet radiation, part of the electromagnetic spectrum, to the test by participants using their very own UV light-detecting bracelet. Learn all about the fascinating electromagnetic spectrum with special focus on ultraviolet radiation – what it is and how it affects humans and the planet. A series of tests will also be conducted to measure the intensity of ultraviolet radiation under different conditions, and participants can continue these at home using their very own bracelet.

MICHAEL RICHARDS, EXECUTIVE DIRECTOR AND
FOUNDER | SCIENCE CAMPS OF AMERICA

#16

WORKSHOP #16 – SHUFFLE TO SUCCESS AND TAP DANCE LIKE PROS

An introduction into the world of tap dance, shuffle into this exciting dance style and gain an understanding of its basics. Participants will learn foundational steps of this rhythmic and stylish dance form. This session is perfect for performers and non-performers alike who are looking to “step out” of their comfort zone and make music using their feet! Flat, closed-toe shoes are required – tap shoes are not required, but can be worn by participants.

VICTORIA CHANG

TAP DANCE CHOREOGRAPHER AND PERFORMER

#17

WORKSHOP #17 – TAKE HEART AND CARE OF THIS PART

Learn all about this vital organ, how to keep it healthy and how to do life-saving CPR! This engaging workshop will also explore the basics of heart disease and ways to prevent it. In addition to learning the steps for CPR, participants will get hands-on experience practicing on an adult mannequin.

JONATHAN HU, MEDICAL STUDENT

| UNIVERSITY OF HAWAI'I JOHN A. BURNS
SCHOOL OF MEDICINE

#18

WORKSHOP #18 – TAKE THE STAGE TO ACT

The spotlight of this workshop will be on the fundamentals of acting. Aspiring performers will explore voice and speech, body and movement, as well as the mind and imagination. Some specific elements of acting – such as improvisation, script analysis and audition skills – will also be covered. This engaging session is designed to develop curiosity, determination, and passion for the art of acting!

KAREN KAULANA, INSTRUCTOR

| MO'OLELO STUDIOS

#19

WORKSHOP #19 – TAKE THE STAGE AND DANCE

Broadway-style dancing and music will fill this one-hour jazz-based workshop. This lively session explores jazz, the style of dance one would typically see on a Broadway stage. This form of dancing emphasizes learning performance skills, including connecting with the audience and facial expressions, while focusing on body awareness and technique.

ALEXANDRIA ZINOV

*(Former NBA Dancer with the Utah Jazz,
choreographer at numerous Utah
and Hawaii schools and studios)*

#20

WORKSHOP #20 – TAKE THE STAGE AND SING

The curtain opens on the concepts of singing musical theater in this dynamic session. Aspiring performers will examine its many facets, including picking the right song that fits their voice and range, to audition and performance techniques. A professional vocal instructor will work with participants in a master class setting to develop proper sound placement, diction and technique for vocal freedom and agility and to find their voice!

CHRISTINE KLUVO, INSTRUCTOR

| MO'OLELO STUDIOS

**TECHNOLOGY****ENGINEERING****ARTS****MATHEMATICS**

REGISTRATION FORM

FIRST NAME _____ LAST NAME _____

MOTHER'S FIRST NAME _____ MOTHER'S LAST NAME _____

FATHER'S FIRST NAME _____ FATHER'S LAST NAME _____

STREET ADDRESS _____ CITY _____ ZIP _____

HOME PHONE _____ SCHOOL ATTENDING _____ GRADE _____

MOTHER'S WORK PHONE _____ MOTHER'S EMAIL _____

FATHER'S WORK PHONE _____ FATHER'S EMAIL _____

STUDENT'S T-SHIRT SIZE (Adult sizes, circle one): S M L XL

Each student will attend two workshops. Put workshop numbers in the blanks in order of preference:

1st _____ 2nd _____ 3rd _____ 4th _____ 5th _____

☐ Check here if mother/guardian will attend the **Parents Only** section; indicate t-shirt size below if she will attend:

(circle one): S M L XL

☐ Check here if father/guardian will attend the **Parents Only** section; indicate t-shirt size below if he will attend:

(circle one): S M L XL

I/We heard about the **SCIENCE SYMPOSIUM+** from (specify): _____

I/We understand my daughter's choices will be honored until the session is filled, and that workshop preferences are assigned in the order registration forms are received. I understand that due to the large amount of registered participants, my daughter may not be placed in one of her five choices. Also, I hereby agree, by signing below, that photographs may be taken of my daughter and used in future Symposium publications.

Mother/Guardian Signature

Father/Guardian Signature

REGISTER by completing **ONE** of the **THREE** options below:

1. **ONLINE** at www.sacredhearts.org/symposium
2. **MAIL** completed registration form to:
SPECIAL PROGRAMS OFFICE, 3253 Waiālae Avenue, Honolulu, HI 96816)
3. **EMAIL** completed registration information to: specialevents@sacredhearts.org

QUESTIONS: Call 808-734-5058, ext. 232