



QUASAR QUEST

QUASARS TO SEA STARS TEEN PROGRAM

ISSUE 3

SUMMER 2010 - SPRING 2011

Santa Barbara
Museum of Natural
History
2559 Puesta del Sol

Ty Warner Sea Center
211 Stearns Wharf

Upcoming Quasar Events

July 23-25

Santa Cruz Island Trip

August 14

Final Presentations

On-Going Events

Star Party
Second Saturday of
each month

Monthly Quasar
Meetings
Third Tuesday of each
month

Cruz Control

Every year, during the month of July, we take a trip to Santa Cruz Island. Unlike other teen science programs that spend their time reading about places like Santa Cruz Island, we get to experience the island itself. It's amazing that we work side by side with archaeologists, entomologists, vertebrate zoologists, and marine biologists-not only on the island, but all summer long. Our journey begins when we pack our bags, with our hopes high and our heads filled with thoughts of tomorrow. Our first steps on the boat are our last on the main land, two hours later we arrive to the island tired, hungry, and eager for the adventure that awaits. The island's rural

terrain requires us to pack into the back of pickup trucks with our next stop being the UC reserve field station. Quickly we change clothes for our first task, fence



removal. After 3 hours in the hot sun, working to restore the island to its natural glory, we head back to base camp. Eating the food that we ourselves made, we clean up and pick our cabins. 6:00 am morning crew starts breakfast

and, after we eat, we pack our lunches and head out. During our time here at Santa Cruz Island we go on two perilous hikes, one to the clear, untouched water of Pelican Bay. The other varies from year to year, but is usually about 8 miles. On our last day on the island we play the ultimate game of wits, Jeopardy. At last we all share the feast of the otter pops, a cold refreshing treat and then prepare to board the boat. As we pull away from the dock, knowing we will be back, we contemplate our journey: was this the end? No, it has only just begun. ~Elena Kennedy

Quasar Alumni Interview: Karla Lara

What years were you in Quasars?

2006-2010

What are some jobs you had?

Some jobs that I had throughout my time in the program were being an interpreter at exhibits, camp assistant, development assistant, vertebrate zoology assistant, and invertebrate zoology assistant.

What university do you attend?

UC San Diego

Did you feel prepared for the content that was taught in your college classes?

The material that has been covered in my classes definitely has been challenging. Who said college was easy? I have to say that the best component that prepared me for the content of the classes was knowing how to manage my time. This is of great value when one goes into college and especially classes regarding homework, and reading.

How has being in Quasars helped you in college?

Being in Quasars helped me be prepared with overall life skills for college.



~ Zaynah Orali

Quasar Diversity at its Best



Junior, Michelle Sevilla, showing her style

Quasars are unique in their own way and each of us has something to give to this program. Let's meet some teens now.

Michelle Sevilla is a 3rd year Quasar and is passionate about the medical sciences. "I like to know how things work", she casually states, as if she has been working in this field for years. That's not the only thing she's interested in though, she can play the guitar, write music, and even sing. She fits many interests into her life and

yet still finds balance.

Elena Kennedy is a 3rd year Quasar and is interested in the outdoors. "I feel at home outside learning about my natural surroundings." She works with Jan Timbrook, learning about the uses of native plants. Elena wants to be a primatologist, working with monkeys in South America. She's very enthusiastic and energetic about her passions in life. Later in life she hopes to join the Peace Corp.

Jacob Knauss is in his 4th year at the Museum.

Jacob is into fashion as well as science. "In ten years I see myself as a marine biologist." Jacob works in the Invertebrate Zoology department, assisting with the bivalve collections. His other hobbies include music, specifically band. He loves the Museum and won't hold back from putting in the effort required to achieve excellence.

One of the best parts of Quasars is how different everyone is, but there are still similar passions- just like any family.

~Elena Kennedy



Junior, Elena Kennedy, having fun at the nature printing workshop

What Do Quasars Do On Weekends?

It's always exciting to learn something new. Quasars love working with the Museum's scientists at weekend workshops. Eric Hochberg led the printing workshop in late January and gave us the opportunity to print different types of leaves and feathers. He introduced us to the methods top-notch printers use.

Dr. Hochberg prints all kinds of things from leaves, feathers and fish to even Giant Squid! Nature printing is the perfect blend of science and art. Paul Valentich-Scott, Curator of Malacology, helped Quasars learn how to identify bivalves during a four hour workshop in February. It was amazing to see

bivalves big and small- now we can go the beach ourselves and identify what we find! After the workshop we ate scallops and smoked clams- delicious! Everyone enjoyed the fun day together, learning fun facts about bivalves.

At the insect collecting workshop led by Dr. Mike Caterino, we got to experience what his job is really like. First, he taught us that insects are a fundamental part of our environment and have many beneficial jobs. Next, we ventured into the field using the "stick and sheet" method, then we sorted and identi-

fied insects in the lab and discovered a new species. Sophomore, Elena Kennedy, observed "You get a different perspective and see the variety of insects in our own museum backyard."

These workshops expand our knowledge about our surrounding world and reveal how we can make new, fun and exciting discoveries everyday!

~Corinna Casey



Quasars use the Berlese funnels to sort insects at the insect collecting workshop

Meet the Sophomores!

What's something that stands out that you've learned?

Estefania Contreras: How astronomy isn't just about stars and planets. There are so many perspectives and different things about astronomy I would have never thought of.

Vianey Hernandez: Insect collecting with Mike C. It was awesome! I loved beating trees up with a stick.

Krystal Krueger: I remember during the summer

learning about black holes and how they don't suck things in, but because of gravity things that are too close get pulled in, like meteors to earth.

What's your favorite part of Quasars and why?

Estefania Contreras: My favorite part about Quasars are the people in it and the museum staff. They always have good vibes and each individual is different in their own way. We are all like a mini family.

Vianey Hernandez: My favorite part is the people, but I also really like all of my jobs right now!

Krystal Krueger: The trips because we all get to hang out together and create new experiences together.

~Evelyn Bobadilla



Estefania Contreras getting ready for Santa Cruz Island



Vianey Hernandez at the Bivalve 101 workshop with Paul Valentich-Scott



Krystal Krueger painting a mural at her job in Nature Collections



The summer 2010 archeology class surveying their site with instructor Ray Corbett

Summer Science Exploration

Amazing science classes were taught during the summer of 2010: Archaeology with Dr. Ray Corbett, Astronomy with Javier Rivera, Comparative Anatomy and Physiology with Michelle Berman M.S., and Marine Symbiosis with Patricia Sadeghian M.S. Each instructor challenged the Quasars to grow as scientists and indeed they did! Passions were fueled with the energy of discovery. Teens in Michelle Berman's class brought science to life through performing necropsies on a Mountain Lion and a Northern Right Whale Dolphin. Students all agreed the class was awesome, despite sometimes leaving with the stench of dead animals or covered in feathers- all a part of the class!

Four lucky students in Ray Corbett's class did field-work at a 5,000-year old Chumash excavation site! They sorted through material, distinguishing artifacts from non-artifacts. They unearthed new knowledge of ancient cultures, literally. In Marine Symbiosis,

a group of six students paired off into partners and were assigned a parasite and its host. Doing in-depth research, going on a day trip to the UCSB Marine Science Institute lab, and doing animal dissections were all a part of developing important science skills.

Estefania and Vianey, who were in the freshman Astronomy class, really enjoyed their instructor, Javier, because "we weren't learning from books or the internet but from hands-on experiences." They both feel that they gained self-reliance and independence while learning, unlike the methods in which they've been taught before. Quasars taught Museum visitors, family, friends and staff what they learned throughout the summer at Final Presentations in mid-August last year. This event is the culmination of eight weeks of hard work for both teens and scientists. The event

was very different from what has been done in the past. The Archaeology class created a mock excavation site in the Museum's backyard and took guests through the site so that they could understand what it's like to be in the field. The Marine Symbiosis class demonstrated relationships between marine hosts and their parasites in the Invertebrate Zoology lab using live animals and amazing drawings. Anatomy and Physiology students created an in-depth presentation using specimens from the Museum's nature collection while the Astronomy class did individual powerpoint presentations and an interactive group presentation to explain topics such as stellar evolution, constellations and planets. These classes instill Quasars with a zeal for science and a love of the natural world. ~Corinna Casey

Quasars to Sea Stars Giraffe Award Recipients



In 2011, two of the museum's staff were awarded the "Giraffe Award." This award is given to those staff members who go above and beyond and stick out their necks to help the teens throughout the year.

The two recipients were Paul Valentich-Scott and Patricia Sadeghian, both in the Invertebrate Zoology department. Let's see how they feel about being involved with the Quasar program!

Q. Was there anyone in your life who influenced your career today?

Patricia: My mom, who always said to do what you loved, and was always very encouraging. Also, my biology teacher Mrs. Lotus, who was a very good role model.

Paul: My father was a big fisherman, that wasn't my passion, but I was on the ocean a lot and that led to marine biology.

Q. Why are you involved with the Quasar program?

Patricia: I like to share my passion with young students who also like science. There weren't a lot of science programs like this when I was a teen.

Paul: I'm really passionate about marine biology, which is not well-taught in school. It was born out of frustration that I didn't have this opportunity.

Q. How long have you been involved with the Quasar program?

Patricia: Since 1999, about ten years.

Paul: I started at the very beginning about 15 years ago. It had a different focus, less science and more socially focused. Me, Terri, and Krista saw the potential for the program to be a great science program.

Q. How have you benefitted from being involved with Quasars?

Patricia: I like being able to see the students go to graduate school, and I always get excited when the teens are excited.

Paul: It's really satisfying seeing them go on to do great things.

Q. What's one of your most memorable experiences with the teen program?

Patricia: Going out in the field to tidepool and do dissections. It's fun when we get out the hammer to crack open animals we're dissecting.

Paul: Final Presentations of the freshman class, because they work so hard and nail it. How it affects the family is very rewarding. I remember the first time I went tide pooling with the Quasars and they got soaked but had a great time.

~Nate Sheridan



Thank You to Our Funders:

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The continuation of Quasars to Sea Stars relies on the support of individuals, foundations, and businesses within our community. To "pay it forward" and support a Quasar currently in the program, please contact Caroline Grange, Director of development, at (805) 682-4711 ext.101

