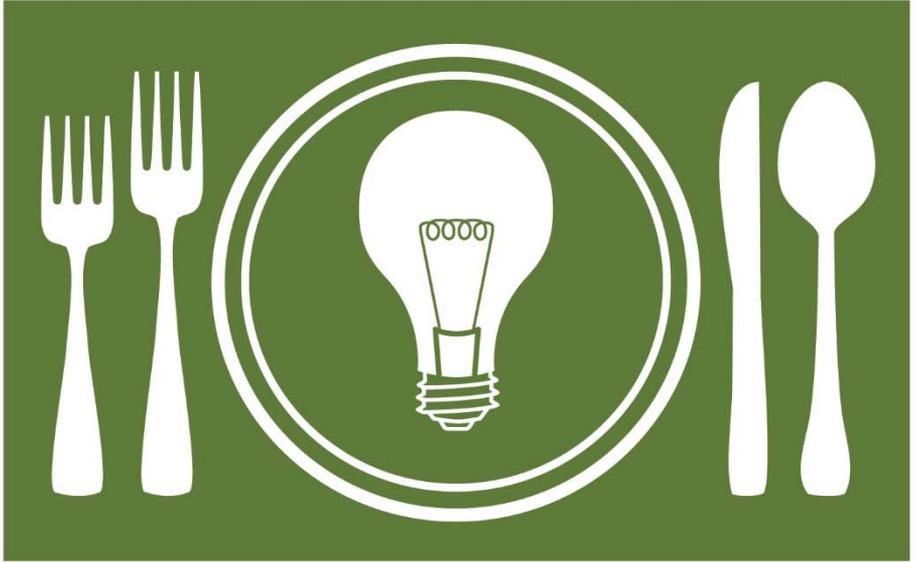


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Oakland Unified School District



**DINNER** with  
**a SCIENTIST**

April 29, 2015, 5-8 pm

Welcome to Oakland Unified School District's seventh annual Dinner with a Scientist! We are proud to collaborate with Chevron Corporation, Oakland Zoo, S. D. Bechtel, Jr. Foundation, and many other science organizations in the Bay Area to offer an evening of science exploration and conversation. Science teaching and learning occurs daily in our schools, but seldom do we have the opportunity to connect scientific concepts with the real work of scientists. Tonight is that rare opportunity to converge education with the local scientific community.

I want to especially thank all the scientists, volunteers, and teachers who made this event possible. The field of science is ever changing as evidenced by the diverse group of scientists in attendance. Whether you are a student interested in science, a science teacher, or a scientist working to improve our understanding of the world around us, my hope is that you broaden your perspective through this evening's activities.

Caleb Cheung  
*Science Manager, OUSD*

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On behalf of the Oakland Zoo, we would like to thank the Oakland Unified School district for organizing this inspiring, exciting event. We are honored to be a part of an evening that brings together teachers, students, and scientists who are interested and energized about science. Among us are current and future leaders of the scientific community. Also among us are the tireless, extraordinary mentors, the ones that have brought all of us to where we are now - teachers.

Whether you are aspiring to become a biologist, chemist, veterinarian, green engineer, or simply a nature lover, we invite you to explore the Oakland Zoo and be inspired by our animals, research, programs, and plans for the future. We hope this evening will help fuel new ideas for learning and bring about career opportunities that many youth have never explored or thought about. Thank you for being passionate about science and have a wonderful evening.

Dr. Joel Parrott  
*Executive Director, Oakland Zoo*

## Program

- 2:00 Visit Zoo (optional)
- 5:00 Registration & Live Animal Encounters
- 5:25 Welcome & Ice Breaker
- Caleb Cheung*  
*Science Manager, OUSD*
- Bo De Long-Cotty*  
*Director of Education, Oakland Zoo*
- Kelly Melia-Teevan*  
*Global Social Investment Advisor, Chevron Corporation*
- Devin Dillon*  
*Chief Academic Officer, OUSD*
- 5:50 Dinner & Conversation with Scientist #1
- 6:20 Keynote
- Lisa White*  
*Director of Education*  
*UC Berkeley, Museum of Paleontology*
- 6:45 Dinner & Conversation with Scientist #2
- 7:15 Raffle
- 7:20 Dessert & Conversation with Scientist #3
- 7:50 Appreciations and Conclusion
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## Menu

- Turbulent 530 nm Salad with Various Suspensions & Emulsions  
*Triticum* Globules with Lipid Spread  
*Malus domestica* Extract
- Dihydrogen Monoxide in Two States with Citrus Accents  
Sodium Chloride & *Piper nigrum*  
Steamed Random Plant Parts  
*Oryza sativa* Seeds & Plant Material
- Grilled *Gallus gallus* with *Allium cepa* & Fungus
- Herbaceous Durum Forms with *Solanum lycopersicum* Sauce
- Heat-Treated Cacao Carbohydrate Solids with Ripened Plant Ovaries  
Wrapped Cacao with *Metha* or *Rubus*

## Scientist Biographies

### **Lisa White**

Keynote

Director of Education,  
UC Berkeley, Museum of Paleontology

[ldwhite@berkeley.edu](mailto:ldwhite@berkeley.edu)

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I am the Director of Education at the Museum of Paleontology at UC Berkeley and part of my job includes developing learning materials and museum programs for teachers and students on the fossil record, evolution, and global climate change. As a youth growing up in San Francisco, I loved museums and was drawn especially to the paleontology and geology exhibits. After receiving my PhD in Earth Sciences from UC Santa Cruz, I was a professor of geology at San Francisco State University where I created science field programs for urban youth in outdoor settings, such as the National Parks. I also study small microfossils found in deep ocean rocks and I love sharing my excitement about fossils and the history of life with others!

### **Allegra Mayer**

Tables 20, 21, 22

Graduate Student, UC Berkeley

[allegramayer@berkeley.edu](mailto:allegramayer@berkeley.edu)

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I am a first year PhD student at UC Berkeley in the department of Environmental Science, Policy and Management. Two of my passions are being outside in nature and eating good food. I study the most important intersection between the environment and food - the nutrients in soil!

### **Evan Santiago**

Tables 6, 4, 5

Financial Analyst, Back to the Roots

[evan@backtotheroots.com](mailto:evan@backtotheroots.com)

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I have been interested in science since I was a child, but what really sparked my interest in science was learning about atoms in high school. To me, learning about atoms was like discovering aliens living on Mars. Although I eventually switched majors, my love for science continued, and after graduating from UC Berkeley's Haas School of Business, I began work at Back to the Roots. Here I get to constantly learn about food science. Yum!

**Fred Schlachter**

Staff Scientist, American Physical Society

Tables 21, 22, 19

fsschlachter@gmail.com

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I am a physicist, working with atoms, lasers, particle accelerators, and fun large tools. I have always been interested in how things work. Now I have some ideas, at all size levels down to atoms. I was good in math and made my own mechanical and electrical toys and radios when I was a kid. I just kept studying math and science and finally realized that experimental physics was what I wanted to do for my career. Always loved it... never looked back.

**Howard Matis**

Staff Physicist Affiliate,

Lawrence Berkeley National Laboratory

Tables 12, 10, 11

hsmatis@lbl.gov

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I am a Physicist at Lawrence Berkeley National Laboratory. I earned my BS from Rensselaer Polytechnic Institute and my PhD from the University of Chicago. I do most of my research using accelerators, a large machine that allows scientists to study sub-atomic particles. Presently I am working at an accelerator in New York and at Switzerland's Large Hadron Collider. I have also worked at the South Pole to observe neutrino production from outer space.

**Hubert Chan**

Analytical Scientist, The Clorox Company

Tables 5, 6, 4

hubert.chan@clorox.com

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I'm a San Francisco native who graduated with a chemical engineering degree at UC Berkeley before completing my PhD at UC Irvine. Even when I was a kid, I've always wanted to walk down a supermarket aisle and think "Hey, I made that!" My education in science and engineering makes that possible, and I think it's great fun to develop products to help people enjoy everyday life a little more!

**Ignacio Escalante**

Graduate Student, UC Berkeley

Tables 10, 11, 12

iescalante@berkeley.edu

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I grew up in San José, Costa Rica, which besides being surrounded with biodiversity... it was a city. In high school, our biology teacher took us to the cloud forest and a coral reef. Those were my first exposures to exuberant tropical nature, and certainly woke up a tremendous desire to observe and explore nature in me. Later on I merged that fascination for nature with my dream of being a scientist in college.

**Ina Reichel**

Physicist, Lawrence Berkeley National Laboratory

Tables 15, 13, 14

IReichel@lbl.gov

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I'm a physicist from Germany. I specialize in particle accelerators. Those are large machines that are used for a variety research projects with particles smaller than an atom. They are really fascinating and I get to work with scientists from all over the world.

**Jared Young**

Associate Professor, Mills College

Tables 4, 5, 6

jyoung@mills.edu

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I decided to become a biologist in my biology class in high school, when we learned about the inner workings of cells. I was fascinated with how these tiny machines could do all these complicated things, and that fascination continues to drive my research today. I like solving puzzles and mysteries, and biology is full of unsolved mysteries. Solving those mysteries can really benefit our society and our world. That's why I love science.

**Jasmine Jackson**

Community Liaison , Back to the Roots

Tables 9, 7, 8

jasmine@backtotheroots.com

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I love gardening and always have! After graduating San Francisco State University, I stumbled upon Back to the Roots and was fascinated by the mission for people to grow their own food. I've loved exploring the mycology and learning about the Mushroom Farms and dabbling into aquaponics with the Water Garden. Everyday, I get to teach people about food, gardening and science.

**Kaitlin Lawler**

Scientist, The Clorox Company

Tables 14, 15, 13

kaitlin.lawler@clorox.com

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I received my Bachelor of Science in Chemical and Biomolecular Engineering at Georgia Tech. Currently I am a scientist doing product development for Clorox, specifically working with kitty litter. In high school, I enjoyed chemistry and other sciences because I got to discover how the world worked while doing hands-on activities. The best part about being a scientist is that I get to play around in a lab and learn something new every day.

**Kaushik Jayaram**

Graduate Researcher, UC Berkeley

Tables 3, 1, 2

[kaushikj@berkeley.edu](mailto:kaushikj@berkeley.edu)

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Growing up, I was fascinated by animals, their incredible capabilities and watched every nature show on TV. I also was curious about how things worked - like a clock or a bicycle. Now, I have combined both of these interests into my work. Half my time is spent chasing and filming animals that move really fast in order to understand how they do it. I then use this knowledge to build small animal-inspired robots in the remainder of my time.

**Kayla Carpenter**

Microbiologist, The Clorox Company

Tables 19, 20, 21

[kayla.carpenter@clorox.com](mailto:kayla.carpenter@clorox.com)

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I am a microbiologist at Clorox. Basically, I help design sanitizing and disinfecting products that kill germs around your house, on your skin, and in hospitals. I earned both my bachelor's and master's degrees from the University of Arizona. When I was young, many little girls liked dressing up as princesses for Halloween. I preferred being a mad scientist screaming "It's alive! It's alive!"

**Kimberly La Pierre**

Postdoctoral Fellow, UC Berkeley

Tables 16, 17, 18

[kimberly.lapierre@berkeley.edu](mailto:kimberly.lapierre@berkeley.edu)

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Looking around the beautiful hills of the Bay Area, where I grew up, I always loved seeing plants of all types. But what are these plants? Many are invasive species that are bad for farmers, ranchers, and people who just want to enjoy nature. My job as a scientist at UC Berkeley is to understand where these plants come from, what allows them to invade our landscape, and how to prevent them in the future.

**Lauren Otis**Fragrance Innovation Scientist,  
The Clorox Company

Tables 8, 9, 7

[lauren.otis@clorox.com](mailto:lauren.otis@clorox.com)

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I work for Clorox R&D as a fragrance expert, where I constantly smell all sorts of things, from fine fragrances to cat litter. As a kid my nickname was "The Bloodhound" because I was always sniffing or tasting various things. I use my unique skill set to translate how people perceive tastes, smells, and textures into insights that help create the great products we use every day!

**Mark Lescroart**

Postdoctoral Fellow, UC Berkeley

Tables 7, 8, 9

mark.lescroart@gmail.com

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I study how our brains allow us to see objects in the world around us. I scan people's brains while they watch movies, and then try to figure out why their brains respond the way they do. I've been interested in science all my life, and after years of trying to figure the world out. I got my PhD from USC in 2011. I've been working in Jack Gallant's lab at Berkeley since.

**Misha Leong**

Postdoctoral Researcher,

California Academy of Sciences

Tables 1, 2, 3

mishaleong@gmail.com

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Insects (and their arthropod cousins) are everywhere! Growing up right here in Oakland, I enjoyed looking for roly pollies under stepping stones, tempting ants with treats on the schoolyard, and observing spiders build their webs from my front porch. I became even more excited about them through classes in college (I went to UCLA, San Francisco State University, and UC Berkeley), field excursions (including trips to the Sierra Nevada, Mexico, Mojave Desert, Costa Rica, and Cameroon), and learning from many other people who are also excited about these little animals. Now, I am studying the arthropod community that lives with us (inside our homes!) as a postdoctoral researcher at the California Academy of Sciences. Over the next two years, my team and I will explore the diversity of homes on all 7 continents to better understand how insects and humans coexist around the globe.

**Nancy Stettler**

Sensory Insights Manager,

The Clorox Company

Tables 11, 12, 10

nancy.stettler@clorox.com

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I have been quite fortunate in my career as a Sensory Scientist. I represent the voice of the consumer, working with fellow scientists to design the latest products that people want. I enjoy working with food products, such as salad dressings, popcorn, and beverages. And more recently, I have worked on pet-care products and household cleaning supplies. It's rewarding to see the products I have helped to create specifically for consumers on the store shelf.

**Omar Gutierrez del Arroyo**

Graduate Student, UC Berkeley

Tables 13, 14, 15

[ogutierrezdela@berkeley.edu](mailto:ogutierrezdela@berkeley.edu)

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I developed my passion for understanding how nature works early on in my life, mainly by spending time with my family outdoors. As I went through school, I was pleasantly surprised to find out that studying nature, as a scientist, was an actual job. Last year I graduated with a Masters from the University of Puerto Rico and began my PhD at UC Berkeley, where I'm continuously motivated to cultivate my passion for nature.

**Rachel Henderson**Science Education Consultant,  
Self-Employed

Tables 22, 19, 20

[rachel.henderson@gmail.com](mailto:rachel.henderson@gmail.com)

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I became interested in biology in 8th grade when I learned about evolution and was amazed by how it shapes all the different kinds of life forms – from single celled organisms to people! I became fascinated specifically by how the brain grows and develops, so after college I went on to earn a PhD in Neuroscience from Stanford. I am now a science educator who currently writes high school biology educational materials for the CK-12 Foundation. I have also taught science classes and have worked at UC Berkeley in the Biology Scholars Program to help students from all different backgrounds to achieve their dreams of becoming scientists and doctors.

**Sarah Bell-West**

Senior Scientist, The Clorox Company

Tables 17, 18, 16

[sarah.bellwest@clorox.com](mailto:sarah.bellwest@clorox.com)

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I am always excited about science related to human health. For my PhD, I studied chemistry and biology at UC Berkeley where I studied ion channels, the proteins involved in transmitting electrical signals in living organisms. I wanted to develop new solutions for real-life problems, so I decided to work in industry. I'm currently a scientist at Clorox where I work with hospitals to provide solutions to keep these environments clean and free of disease-causing pathogens.

**Sarah Richardson**

Tables 2, 3, 1

Postdoctoral Fellow,

Lawrence Berkeley National Laboratory

[Smrichardson@lbl.gov](mailto:Smrichardson@lbl.gov)

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When I was a little girl in Baltimore, I wanted to explore outer space and find aliens. Then I discovered that bacteria is the strangest living thing on earth. Now my job is to 'train' bacteria to solve human problems. This is similar to the way we use horses to travel and cats to catch mice. I am studying how to use bacteria to make fuel or clean up oil spills. While it seems like an odd idea, we already use them to make foods like bread and cheese!

**William Thur**

Tables 18, 16, 17

Mechanical Engineer,

Lawrence Berkeley National Laboratory

[gwthur@gmail.com](mailto:gwthur@gmail.com)

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I am a mechanical engineer at Lawrence Berkeley National Laboratory. I've worked in several fields, but my main career has been helping the scientists at Lawrence Berkeley Laboratory to do their experiments successfully and safely. I like to solve problems and make things work. Designing, building, and fixing machines and systems are what I like best. Scientists and engineers are people who really know how the world works, and they will be even more important in the future.

## Notes

## **Participating Schools**

Bret Harte MS, Castlemont HS, Edna Brewer MS,  
Elmhurst Community Prep, Fremont HS, Frick MS,  
Greenleaf, La Escuelita, Montera MS, Oakland HS,  
Oakland International HS, Oakland Technical HS, Parker MS,  
Roosevelt MS, Roots International Academy, Skyline HS,  
Street Academy, United for Success,  
Urban Promise Academy, West Oakland MS

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## **Acknowledgements**

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(Event Funding)*

Oakland Zoo

*Bo De Long-Cotty and the Education Department  
(Facilities, Donations, Planning, & Activities)*

Keynote Scientist

*Lisa White*

Volunteer Scientists

*Allegra Mayer, Evan Santiago, Fred Schlachter,  
Howard Matis, Hubert Chan, Ignacio Escalante, Ina Reichel,  
Jared Young, Jasmine Jackson, Kaitlin Lawler, Kaushik Jayaram,  
Kayla Carpenter, Kimberly La Pierre, Lauren Otis, Mark Lescoart,  
Misha Leong, Nancy Stettler, Omar Gutierrez del Arroyo,  
Rachel Henderson, Sarah Bell-West, Sarah Richardson, William Thur*

Oakland Unified School District

*Caleb Cheung, Christine Chen, Herberta Zulueta,  
James Narvaez, Julia Feldman, Nicole Solis,  
Ricky Logan, Thom Reinhardt*

Other

*Espresso Gourmet (Catering)*

Photos from tonight's event will be available at  
<http://science.ousd.k12.ca.us>