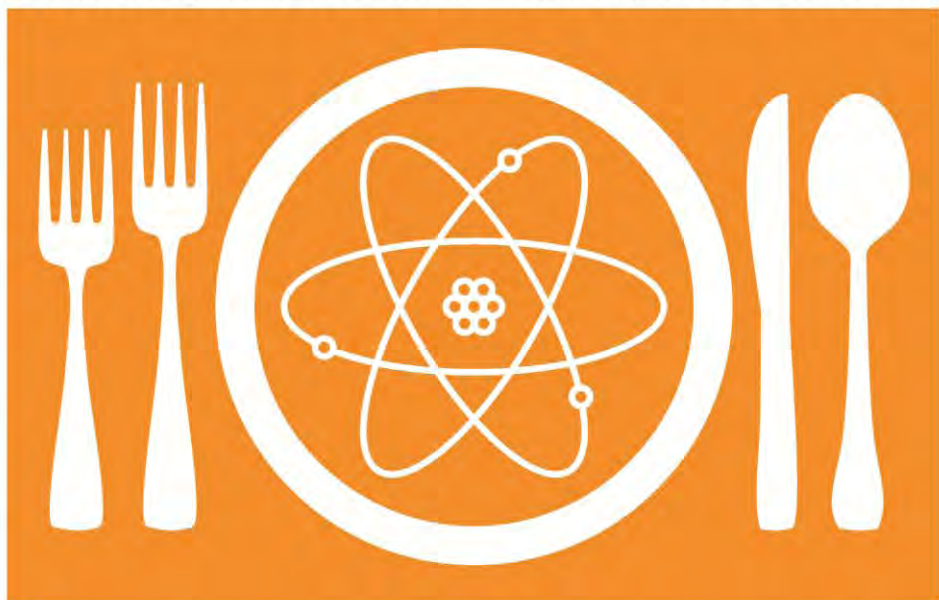


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Oakland Unified School District



DINNER

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with a

SCIENTIST

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June 2, 2010, 5-8 pm  
Oakland Zoo

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Welcome to Oakland Unified School District's second annual Dinner with a Scientist! We are proud to collaborate with the Bechtel Foundation, Chevron Corporation, Oakland Zoo, and many organizational partners 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 link education with the local scientific community.

I want to especially thank all the scientists, volunteers and teachers who have 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, my hope is that you broaden your perspective through this evening.

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
- 5:00 Registration & Live Animal Encounters (*patio*)
- 5:25 Seating (*table # on name tags*)
- Welcome & Ice Breaker  
*Caleb Cheung, Science Manager, OUSD*
- OUSD Welcome  
*Dr. Tony Smith, Superintendent, OUSD*
- 5:50 Dinner & Conversation with Scientist #1
- 6:20 Oakland Zoo Welcome & Keynote Introduction  
*Dr. Joel Parrott, Executive Director, Oakland Zoo*
- Keynote  
*Margaret Rousser, Lead Keeper, Oakland Zoo*
- 6:40 Dinner & Conversation with Scientist #2
- 7:10 Raffle
- 7:20 Dessert & Conversation with Scientist #3
- 7:50 Appreciations and Conclusion
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## Menu

Random Leaves and Solutions  
Wheat, Yeast, and Garlic Mixture  
Extract of Newton's Favorite Fruit  
Dihydrogen Monoxide in Two States with Citrus Accents  
Sodium Chloride & *Piper nigrum*  
Steamed Random Plant Parts  
Grass Seeds and Random Plant Parts  
Herbivore's & Carnivore's Lasagna  
Grilled Poultry with Fungus and Roots  
Heat-Treated Cacao Carbohydrate Solids

## Scientist Biographies\*

### **Margaret Rousser**

Keynote

Lead Keeper, Oakland Zoo

[margaret@oaklandzoo.org](mailto:margaret@oaklandzoo.org)

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I am passionate about both animal behavior and conservation. My current focus at the Oakland Zoo is divided between using operant conditioning to manage and improve zoo animal welfare and the conservation of California's only native aquatic turtle, the Western Pond Turtle. I earned a bachelor's degree from University of California, Santa Barbara in Anthropology as well as a degree in Wildlife Management from Moorpark College. My diverse career in animal care and management has included dolphin training and assisted reproduction in baboons.

### **Anthony Mullen**

Tables 21, 22, & 20

Structural Materials Representative, Caltrans

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I graduated from UCSD with a degree in Structural Engineering. While in college, I was lucky enough to work in the Structural Testing laboratory which was fun because we got to build things and then break them apart to see how they failed. I am currently working on 3 bridges in the Bay Area. Science is cool because it can help you understand how things work and how to make things better.

### **Ben Ramage**

Tables 10, 11, & 12

Graduate Student Researcher, UC Berkeley

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

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I research forest ecology, particularly natural disturbances to forest plant communities like the effect of wildfire and the disease "sudden oak death" in redwood forests. I love what I do because I get to spend a lot of time in beautiful places, and I feel great satisfaction helping to discover the unsolved mysteries of nature.

\*Scientists are listed alphabetically by first name

**Bob Jacobsen**

Tables 2, 3, &amp; 1

Physics Professor,  
UC Berkeley[jake@physics.berkeley.edu](mailto:jake@physics.berkeley.edu)

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I'm an experimental physicist, currently building an experiment to look for dark matter that will be installed 4000 feet below the surface in a mine near Deadwood, South Dakota. I like building things, I like learning about how the Universe really works, and I really like that physicists get to do both.

**Chani Sentiwany**

Tables 3, 1, &amp; 2

Criminalist,  
Oakland Police Crime Lab[csentiwany@oaklandnet.com](mailto:csentiwany@oaklandnet.com)

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I am a criminalist at the Oakland Police Department Crime laboratory. I have a BA in Psychobiology from UC Santa Cruz. I am also currently working towards obtaining my MS in Forensic Science from UC Davis. I work in the forensic biology section of the crime lab which includes examining evidence from major crimes. If biological material is found, I conduct DNA typing and interpret and report my results. I may also testify to my results in court.

**Christopher Richard**

Tables 4, 5, &amp; 6

Curator of Aquatic Biology,  
Oakland Museum of California[cr@museumca.org](mailto:cr@museumca.org)

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My educational background is in marine invertebrate zoology. At the museum, I have expanded my horizons to include freshwater ecology and, most recently, the history of modification of wetlands in the San Francisco Bay Area.

**Dan Werthimer**

Tables 5, 6, &amp; 4

SETI Program Director, UC Berkeley

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I direct the Search for Extraterrestrial Intelligence (SETI) program, focusing on the SETI@home project. My work includes working with volunteers to analyze data from our planet's largest radio telescope. Many participants are elementary school students who use their computers to search for signals from other civilizations. Together, the SETI@home volunteers have formed one of Earth's most powerful supercomputers to try to answer the question, "Are We Alone?"

**Darko Cotoras**

Graduate Student, UC Berkeley

Tables 16, 17, &amp; 18

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

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I'm interested in the evolutionary origin of biodiversity. I studied Biology as well as Ecology and Evolutionary Biology at the Universidad de Chile. Now, I'm completing a PhD in the department of Integrative Biology at UC Berkeley focusing on how new animals develop on ocean islands.

**Felicia Walker**Program Animal Specialist,  
Oakland Zoo

Tables 7, 8, &amp; 9

[felicia@oaklandzoo.org](mailto:felicia@oaklandzoo.org)

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My job is to train staff and volunteers to handle and present program animals. I also get the privilege of working with our Animal Management department; we collaborate on the most appropriate ways to train the animals for guests' encounters. I also consider myself an Environmental Educator as I have travelled overseas, teach environmental workshops and learn about conservation research.

**Gwynn Simon**Infectious Disease/Internal Medicine Physician,  
Kaiser-Permanente  
[gwynn.simon@kp.org](mailto:gwynn.simon@kp.org)

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Tables 6, 4, &amp; 5

I decided to become a physician because I like science and I like figuring out what makes a person sick and the best treatment to help them get better. Infectious Disease is an interesting area of medicine because in many ways it is like being a detective. It involves using a microbiology lab to help figure out if the cause of the infection is a bacteria, virus, fungus, or parasite.

**Jamie Valenti-Jordan**Project Engineer, Del Monte Foods  
[james.valenti-jordan@delmonte.com](mailto:james.valenti-jordan@delmonte.com)

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Tables 9, 7, &amp; 8

I went into engineering to figure out tough logic problems using science. I chose the food industry because it is something real that you can touch, and when you are done with your experiments, you can eat them! I work on all sorts of projects from solar panels to soup, so it is something new every day. Before Del Monte, I worked for Campbell Soup, General Mills, and Pillsbury.

**Jenna Judge**

Graduate Student, UC Berkeley

Tables 20, 21, &amp; 22

jennajudge2@gmail.com

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I always liked science. In high school, I became interested in marine biology and while getting my undergraduate degree at UCSB, I decided I wanted to be a scientist. Now, I am completing my PhD studies in the Integrated Biology department at UC Berkeley when I'm focusing on how the environment has changed over Earth's history, how it has affected animals, and how future changes may affect them.

**Jennifer Hofmeister**

PhD Student, UC Berkeley

Tables 13, 14, &amp; 15

jenkkhof@berkeley.edu

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I am currently working on a PhD at UC Berkeley studying octopus mating behavior and how interactions with the environment can influence their behavior. I have traveled to Tahiti and Australia to conduct research and have worked in an aquarium taking care of marine animals while teaching the public about the ocean. Not only is the ocean still mysterious in many ways, but it is a great source of intrigue for aspiring marine biologists.

**Jennifer Jacobs**

Graduate Student, UC Berkeley

Tables 23, 24, &amp; 25

jmjacobs@berkeley.edu

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I grew up in northern California and spent a lot of time outdoors as a child. I attended UC Santa Cruz for my undergraduate education, received a MS from San Francisco State, and am now pursuing a PhD at UC Berkeley studying tropical ecology, with a focus on plant-insect interactions. Taking field classes and studying abroad in Costa Rica made me even more excited about biology.

**Jennifer Kerekes**

Graduate Student, UC Berkeley

Tables 22, 20, &amp; 21

kerekesj@berkeley.edu

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Before entering graduate school, I served as a Peace Corps Volunteer in El Salvador, Central America. There, I became interested in issues of tropical conservation and then decided to return to graduate school. I am currently working on my PhD in microbiology at UC Berkeley focusing on the ecology and diversity of microbial communities across different habitats and substrates. My field-work is in California and Central America.

**Jenny Ellis**

Research Chemist, Chevron Corporation

Tables 8, 9, &amp; 7

jfiw@chevron.com

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I am a Research Chemist at Chevron, with a PhD in Analytical Chemistry. I have a very interesting job where I split my time doing 50% running a high volume analytical lab and 50% research where I am developing new methods using ICPMS to speciate different metals found in crude oils. I have always loved to solve problems, and I always have enjoyed a challenge which is why I majored in Chemistry.

**Laura Verduzco**

Lead Planning Engineer, Chevron Corporation

Tables 11, 12, &amp; 10

laurav@chevron.com

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I am a Chemical Engineer working at Chevron to help the company adopt low carbon technologies throughout its operations. Previously, I worked in the Office of Hydrogen of the Department of Energy. I became interested in science because I had a great chemistry teacher in high school who inspired me and because I wanted to do something to reduce environmental pollution.

**Linda Strubbe**

PhD Candidate, UC Berkeley

Tables 24, 25, &amp; 23

linda@astron.berkeley.edu

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I am a 7th-year astronomy graduate student at UC Berkeley studying the large black holes at the centers of galaxies and what happens when they "eat" nearby stars. I've also done research on how rocky planets like the Earth form. My interest in astronomy started in 6th grade, when my father and I learned all the stars and constellations -- my favorite star is in the constellation Libra and is called Zubenelgenubi!

**Lindsay Waldrop**

Doctoral Candidate, UC Berkeley

Tables 26, 27, &amp; 28

lwaldrop@berkeley.edu

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I am a PhD graduate student in the department of Integrative Biology at UC Berkeley where I study comparative biomechanics which is studying the way animals interact with their environments by using the tools of physics and engineering. Right now, I am studying hermit crabs. I got interested in science because I asked a lot of questions and it turns out that science is the best way of finding out the answers!



**Margaret S. Race**

Astrobiologist, SETI Institute &amp; NASA

Tables 14, 15, &amp; 13

mracemom@aol.com

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As a young girl, I loved competitive swimming, beaches and SCUBA diving. I eventually got my PhD at UC Berkeley specializing in marine ecology and environmental management. Over the years, I've studied many different environments and organisms. My job with NASA involves "planetary protection," making sure we don't contaminate other planets and moons when we search for extraterrestrial life in the solar system. You can never predict where a science education will take you!

**Mary Kate Morris**

Research Scientist, California Department of Public Health

Tables 25, 23, & 24

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I am Virologist at the California Department of Public Health and received my PhD at UC Berkeley. I develop vaccines and treatments for HIV/AIDS. I am currently working with antibodies that have unusual properties that may eventually help patients infected with HIV. I first became interested in HIV when I was in the Peace Corps in the Central African Republic in the 1980s and have been working with this virus since then.

**Peter Cowan**

Graduate Student, UC Berkeley

Tables 27, 28, & 29

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Wildfires can be destructive, not only to people and buildings, but also to the plants that fuel them. However, fire is also extremely important for some plant communities in California. I have been studying shrubs in California and Australia that depend on wildfires for their seeds to grow because it will help to protect rare plants and help to predict wildfire patterns. When not in the lab I can usually be found backpacking, going for a bike ride, or sipping a cup of coffee.

**Peter Wade**

PGE Technician, Cal Poly Engineer

Tables 17, 18, &amp; 19

wade\_pf@yahoo.com

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I am a 25 year old African-American male from East Oakland. I faced many challenges growing up in the Bay Area and pressed on to attend and graduate from California Polytechnic State University in San Luis Obispo, CA. While attending college I became president of National Society of Black Engineers, CP Chapter President. I wish to inspire young at-risk youth to dream of success and attend a college of their choice.

**Randolf Klein**

Tables 28, 29, &amp; 26

Senior Fellow in Physics,  
UC Berkeley[r\\_klein@berkeley.edu](mailto:r_klein@berkeley.edu)

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I received my doctoral degree from the University in Jena, Germany and currently work as an astrophysicist at UC Berkeley. My work focuses on two things: Answering the question, "How do massive stars form?" and building instruments. Currently, I am involved in building a 100 inch telescope for NASA's airborne observatory SOFIA (Stratospheric Observatory for Infrared Astronomy) that is on a 747 Boeing jet. It studies how stars form.

**Stacy Month**

Tables 12, 10, &amp; 11

Pediatric Hematologist/Oncologist,  
Kaiser-Permanente[stacy.month@kp.org](mailto:stacy.month@kp.org)

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I have worked at Kaiser Oakland Hospital for over 20 years as a pediatric doctor specializing in hematology and oncology. This means I take care of children who have cancer or serious blood diseases. I am excited that this field has changed rapidly and we are now very successful at curing most of our patients. It is very interesting to follow my patients to see how they are doing years after their treatment is finished.

**Susan Bailey**

Tables 18, 19, &amp; 16

User Services Group Leader,  
Lawrence Berkeley National Lab[sbailey2@lbl.gov](mailto:sbailey2@lbl.gov)

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I have a degree in Biochemistry and a PhD in protein crystallography. For over twenty years I have researched and published papers on the atomic resolution structures of proteins. I now work as a staff scientist managing the user services and communications groups at the Advanced Light Source, a synchrotron facility delivering high intensity x-ray beams. I've always wanted to know how things work and I find all science, but especially Biology fascinating.

**Susan Molloy**

Criminalist, Oakland Police Crime Lab

Tables 15, 13, &amp; 14

smolloy@oaklandnet.com

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I am a firearm examiner and have worked in the forensic science field for 15 years. I graduated with a Bachelor of Science from Cal State East Bay. At my job, I examine guns and ammunition in order to determine if a bullet or cartridge case was fired from a single firearm. My exams provide leads to Police Detectives and link or exclude guns from crimes that have happened.

**Tana Langley**

Criminalist, Oakland Police Crime Lab

Tables 29, 26, &amp; 27

tlangley@oaklandnet.com

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I am a forensic chemist with the Oakland Police Department Crime Lab. I received my BS in Chemistry from the University of Texas and my MS in Chemistry from the University of Hawaii. I have worked at the Oakland Crime Lab for ten years. My primary duties are the analysis of controlled substances and the processing of crime scenes. I am also working on re-establishing the arson program at OPD.

**Victor Alm**

Lead Keeper, Oakland Zoo

Tables 1, 2, &amp; 3

victor@oaklandzoo.org

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After graduating from Northern Arizona University, I began my career with an internship at the Oakland Zoo. As lead zookeeper, I manage both the animals and staff in several areas of the zoo including the education animal room, sun bear, warthog, and hyena. Outside of work, I spend time volunteering with my family at the Marine Mammal Center in Sausalito.

**Wei Tang**

Clinical Lab Scientist, Alameda County Medical Center

Tables 19, 16, &amp; 17

weic.tang@sbcglobal.net

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I received my medical degree in China and then completed an internship for medical technology at the Advanced Medical Technology Center of San Francisco State University and Highland Hospital in Oakland. Since then, I've been working as a clinical laboratory scientist testing patient blood, urine, stool or body fluids. These test results assist doctors in diagnosing patients. Interest in chemistry and biology as well as curiosity about the human body and illness brought me to the medical science and health care field.

## **Participating Elementary Schools**

Acorn Woodland, Allendale, Bella Vista, Bridges Academy, Brookfield, Burckhalter, Chabot, Community United, Crocker Highlands, East Oakland Pride, Emerson, Encompass Academy, Esperanza, Fruitvale, Futures, Garfield, Glenview, Global, Global Family School, Grass Valley, Horace Mann, International Community, Joaquin Miller, Kaiser, Korematsu Discovery Academy, La Escuelita, Lakeview, Laurel, Lazear, Learning Without Limits, Lincoln, Manzanita Community School, Markham, Marshall, Martin Luther King Jr., Montclair, New Highland Academy, Parker, Piedmont Avenue, Place at Prescott, Redwood Heights, Rise, Santa Fe, Sequoia, Think College Now, Thornhill

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Jenny Ellis, Jennifer Hofmeister, Jennifer Jacobs, Bob Jacobsen,  
Jenna Judge, Jennifer Kerekes, Randolph Klein, Tana Langley, Susan Molloy,  
Stacy Month, Mary Kate Morris, Anthony Mullen, Margaret S. Race,  
Ben Ramage, Christopher Richard, Chani Sentiwany, Gwynn Simon,  
Linda Strubbe, Wei Tang, Jamie Valenti-Jordan, Laura Verduzco,  
Peter Wade, Lindsay Waldrop, Felicia Walker, Dan Werthimer*

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