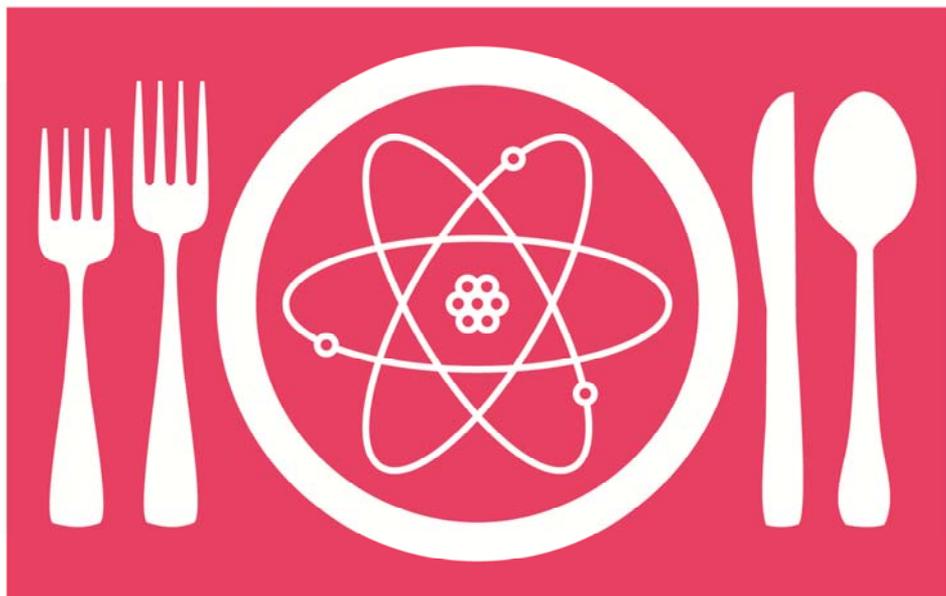

Oakland Unified School District



DINNER

— with a —

SCIENTIST

June 1, 2011, 5-8 pm
Oakland Zoo

Welcome to Oakland Unified School District's third annual Dinner with a Scientist! We are proud to collaborate with the S.D. Bechtel Jr. Foundation, Oakland Zoo, National Geographic, Delta Education, and many other science organizations in the Bay Area to offer an evening of science exploration and conversation. Science teaching and learning occurs regularly 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

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 Encounter
- 5:25 Seating (*table # on name tags*)
- Welcome & Ice Breaker
Caleb Cheung, Science Manager, OUSD
- District Welcome
Tony Smith, Superintendent, OUSD
- Zoo Welcome
Shauna Lavi, Community Programs Manager, Oakland Zoo
- 5:50 Dinner & Conversation with Scientist #1
- 6:20 Keynote
Colleen Kinzley, Oakland Zoo
- 6:40 Dinner & Conversation with Scientist #2
- 7:10 Raffle & Science Department Achievement Award
- 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
Ground Sodium Chloride & *Piper nigrum*
Steamed Random Plant Parts
Grass Seeds and Random Plant Parts
Carnivore's Lasagna
Herbivore's Strands of Dough with Solanum Sauce
Grilled Poultry with Fungus and Roots
Heat-Treated Cacao Carbohydrate Solids

Scientist Biographies

Colleen Kinzley

Keynote

General Curator, Oakland Zoo

colleen@oaklandzoo.org

I am the General Curator at the Oakland Zoo. I have an MS in biology and I have worked at the Oakland Zoo for the past 20 years and I have always been interested in animals. I study elephant behavior in Namibia, Africa. During tonight's event, I will be sharing my research about male elephants.

Alyssa Rosenbloom

Tables 7, 8, 9

Graduate Student Researcher, UC Berkeley

kadiya3@berkeley.edu

I am a PhD candidate in the Bustamante Lab at UC Berkeley. I completed my BS in Genetics and Biochemistry at Texas A&M University. I went into science in order to find things out about the world that were previously unknown or not well understood. I became interested in science during high school in my AP Biology course, especially when we studied genetics in fruit flies!

Arunan Skandarajah

Tables 10, 11, 12

Graduate Student Researcher, UC Berkeley

arunan@berkeley.edu

I am a PhD candidate in Bioengineering at UC Berkeley working on how to safely deliver medicines. Before that, engineering drew me in with opportunities to design and modify new instruments and software. I became interested in Bioengineering because it allows me to focus on improvements in human health.

Ashley Gibb

Tables 29, 30, 28

Graduate Student Researcher, UC Berkeley

ashleygibb@gmail.com

I'm currently a graduate student studying chemistry, physics and nanotechnology. This means that I get to work with and see really small materials! I went into science because I love learning about the world. I studied chemistry and then spent a year living and teaching in Indonesia.

Chani Sentiwany

Tables 9, 7, 8

Criminalist II, Oakland Police Department

csentiwany@oaklandnet.com

I am a criminalist at the Oakland Police Department Crime laboratory. I have an MS in Forensic Science from UC Davis and BA in Psychobiology from Santa Cruz. I work in the forensic biology section examining evidence for biological material such as blood or saliva. I conduct DNA typing, report results, and may testify in court. I enjoy my job because every case is like a puzzle to solve and each is new and different.

Christie Canaria

Research Scientist, Lawrence Berkeley National Lab

Tables 16, 17, 18

cacanaria@lbl.gov

I am a Research Scientist who runs a microscope lab that studies brain disorders like Huntington's Disease. I started working in labs in high school and then earned a BS in chemistry at UC San Diego and a PhD at the California Institute of Technology.

Craig Strang

Associate Director, Lawrence Hall of Science

Tables 4, 5, 6

cstrang@berkeley.edu

I am an Associate Director at the Lawrence Hall of Science. My degree is in Environmental Studies and I particularly like the ocean. I did research on elephant seals, California sea lions and humpback whales before starting a marine science program for elementary and middle schools. In my current job, I work with kids, teachers, school administrators and museum educators.

Dan Werthimer

Astronomer, UC Berkeley

Tables 12, 10, 11

danw@ssl.berkeley.edu

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?"

Darcy Ernst

Graduate Student Researcher, UC Berkeley

Tables 13, 14, 15

dfkernst@berkeley.edu

I am a graduate student in the Integrative Biology Ph.D. program at UC Berkeley. In the past I have studied ground squirrel behavior and the brains and behavior of giant orange sea slugs. Studying slugs allowed me to SCUBA dive to see them in their natural habitat. Now I study birds and how their hormones respond to the environment to allow them to breed. Whatever the animal I'm studying, I love learning about how the brain controls the behaviors of animals; human behavior is determined in much the same way!

Gareth Williams

Project Scientist, Lawrence Berkeley National Laboratory

Tables 28, 29, 30

gwilliams@lbl.gov

I am a project scientist focusing on biophysics. I am interested in how the shape and structure of proteins relate to the jobs that they do in the cell. My work helps us to fight cancer. I knew I wanted to be a scientist when I worked in a veterinary lab. After completing my BS and PhD in the United Kingdom, I moved to Berkeley, and have loved being a scientist here for the last 5 years!

Gautham Venugopalan

Tables 19, 20, 21

Graduate Student Researcher,
UC Berkeleygautham.venugopalan@gmail.com

I'm a PhD student at UC Berkeley. I research how growing cells interact with their surroundings to develop into complex, organized structures. This work will help us to fight cancer. It's really exciting to develop new technology and to try answering questions to which nobody knows the right answer.

Gwynn Simon

Tables 11, 12, 10

Internal Medicine Physician, Infectious Disease Specialist,
Kaiser-Permanentegwynn.simon@kp.org

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.

Helen Budworth

Tables 20, 21, 19

Biochemist Project Scientist,
Lawrence Berkeley National Laboratoryhbudworth@lbl.gov

I was always fascinated with the workings of the human body and wanted to get at the details of how we are organized and how we function in the way that we do. I studied Genetics and then Biochemistry at Oxford University in England. Today, I get to work with cells and tissues from different areas of the body, including blood, skin and brains and I am able to see how things work at even the most detailed level.

Ina Reichel

Tables 30, 28, 29

Senior Scientific Engineering Associate,
Lawrence Berkeley National Laboratoryireichel@lbl.gov

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.

Jamie Valenti-Jordan

Tables 3, 1, 2

Project Engineer, Del Monte Foods

james.valenti-jordan@delmonte.com

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.

Jenny Ellis

Tables 26, 27, 25

Research Chemist, Chevron Corporation

jfiw@chevron.com

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.

Jeremy Thorner

Tables 1, 2, 3

Professor of Biochemistry & Molecular Biology,

University of California, Berkeley

jthorner@berkeley.edu

I am a Professor of Molecular and Cell Biology at the University of California, Berkeley. My research focuses on cell growth and cell division. I earned my A.B., in Biochemical Sciences from Harvard College in 1967, and my Ph.D. in Biochemistry from Harvard University in 1972. I joined the faculty at UC Berkeley in 1974 and have won many honors and awards for my work.

Jonathan Braidman

Tables 15, 13, 14

Science Coordinator, Astronomy Instructor

Chabot Space & Science Center

jbraidman@chabot.space.org

I work at Chabot Space and Science Center teaching people of all ages about Space. After studying Physics and Astronomy at the University of Massachusetts, Amherst, I taught high school science for many years in New York City. When I moved to California, I went right up the hill to Chabot and got a job! My first interest in science was sparked by some very good teachers, and so I consider it my duty to pass that inspiration on to our future scientists.

Laura Verduzco

Tables 8, 9, 7

Lead Planning Engineer, Chevron Corporation

laurav@chevron.com

I am currently working as a Lead Planning Engineer at Chevron Energy Technology Company. I help assess global climate change-related issues to provide technical and strategic guidance. When I lived in Mexico City, the air was very dirty and I had respiratory problems most of the time. That is when I realized that I wanted to work on improving the environment for my health and the health of the planet. I have a bachelor's degree in Chemical Engineering and a doctoral degree in Environmental and Energy Management

Lesley Koteles

Tables 23, 24, 22

Team Leader, Chevron Corporation

lsnu@chevron.com

Currently, I am a chemist at Chevron, where my career has included inorganic, organic and analytical chemistry. However, my first science fair project on ecosystems sparked my interest in science. I earned a B.S. in marine biology from Eckerd College in St. Petersburg, FL, during which time I was interned my senior year at Mote Marine Laboratory Center for Shark Research. Then, I earned a M.S. in chemistry from UC Davis. Science is a wonderful field where every day is a different story with something unique to invent, try, test, and learn.

Lisa Fernandez

Tables 22, 23, 24

Graduate Student Researcher, UC Berkeley

fernandez@berkeley.edu

I am from the Imperial Valley, which is a small agricultural community in southeastern California. Because alfalfa fields and food crops were a very common sight, I became interested in studying agriculture. I attended UC Berkeley and graduated from the Department of Environmental Science, Policy, and Management with a focus in Agroecology. I am now a graduate student at UC Berkeley, where I study harmful effects of pesticides on ladybugs.

Mary Kate Morris

Tables 14, 15, 13

Research Scientist,

California Dept of Public Health

marykate.morris@cdph.ca.gov

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 (near the beginning of the epidemic) and have been working with this virus since then.

Michelle Moy

Food Technologist, Del Monte Foods

Tables 18, 16, 17

michelle.moy@delmonte.com

I am a food scientist working at Del Monte Foods in the Fruit Research and Development creating new products. I received a Bachelor's Degree in Food Science from the University of Illinois at Urbana-Champaign. Food science combines my interest in cooking and chemistry. Understanding the science behind food products makes walking through the grocery store an adventure.

Michelle Regan

Food Scientist, Clif Bar

Tables 6, 4, 5

mregan@clifbar.com

I am a Food Scientist working at Clif Bar where I develop nutrition bars. I received my Food Science Degree from Cal Poly, San Luis Obispo. I have been in the food business for 15 years developing different types of food products from frozen entrees to beverages. If you love to be in the kitchen and create different food items, I highly suggest you check out Food Science.

Nicholas McConnell

Graduate Student Researcher, UC Berkeley

Tables 21, 19, 20

nmcc@berkeley.edu

I am a PhD student in Astronomy at UC Berkeley. I use giant telescopes to search for supermassive black holes in distant galaxies. When I was young my parents gave me books about dinosaurs and volcanoes and creatures in the deep ocean. I had so many questions about the weird stuff in those books, and I just kept asking questions as I grew up. Now it's my full-time job!

Robyn La Marr

Chemistry Manager, Highland Hospital

Tables 2, 3, 1

rlamarr@acmedctr.org

I have worked in clinical labs in hospitals for over 20 years. I am fascinated the complexities of the human body. In the Chemistry department, I influence the quality and advancement of knowledge for doctors to use to help care for their patients. I was educated at SFSU, VA Martinez, and U of Phoenix.

Roland Gangloff

Visiting Scientist, UC Berkeley

Tables 24, 22, 23

rgangloff38@gmail.com

I am a paleontologist with a PhD from UC Berkeley. Though officially retired, I am still writing about my work and the experiences that I have been fortunate to have. I began my research career looking at the Cambrian, but fate took me to Fairbanks, Alaska and many years of field work studying Arctic dinosaurs. As a young boy, I was a rockhound and that has stayed with me - the rocks hold amazing stories.

Shannon Cavness

Tables 27, 25, 26

Criminalist II, Oakland Police Department

scavness@oaklandnet.com

I have a Masters degree in Forensic Science from UC Davis. I worked as an intern at the Department of Justice and was hired as a Criminalist after graduation. I work at the Oakland Police Department Criminalistics Division in the forensic biology and crime scene units. I have enjoyed solving puzzles since I was a little girl. I always wanted to be a detective as a child and now I am a "biological detective".

Stacy Moth

Tables 17, 18, 16

Pediatric Hematologist/Oncologist,
Kaiser-Permanente

stacy.month@kp.org

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 5, 6, 4

User Services Group Leader,
Lawrence Berkeley National Laboratory

sbailey2@lbl.gov

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 at the Advanced Light Source, a synchrotron facility delivering high intensity x-ray beams. I've always wanted to know how things work. I find all science, especially Biology, fascinating.

Susan Tsutakawa

Tables 25, 26, 27

Research Scientist,
Lawrence Berkeley National Laboratory

setsutakawa@lbl.gov

I am working to understand how proteins mechanistically function from biochemistry and structural analysis at Lawrence Berkeley National Laboratory. I have a PhD from UC Berkeley. After I finished school, I lived and worked in Japan. When I was young, I didn't like science, especially biology. Then one summer I washed dishes in a biochemistry lab and learned that science is about finding out the answers to new questions. What fun!

Participating Schools

Acorn Woodland, Allendale, Bella Vista, Bridges Academy, Carl Munck, Community United, Crocker Highlands, East Oakland Pride, Emerson, Encompass Academy, Franklin, Fruitvale, Futures, Garfield, Global Family School, Grass Valley, Greenleaf, Hoover, Horace Mann, International Community School, Joaquin Miller, Kaiser, Korematsu Discovery Academy, La Escuelita, Lafayette, Lakeview, Laurel, Lazear, Learning Without Limits, Lincoln, Manzanita Seed, Markham, Marshall, Martin Luther King Jr., Montclair, New Highland Academy, Parker, PLACE at Prescott, Redwood Heights, RISE, Sobrante Park, Think College Now, Thornhill

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