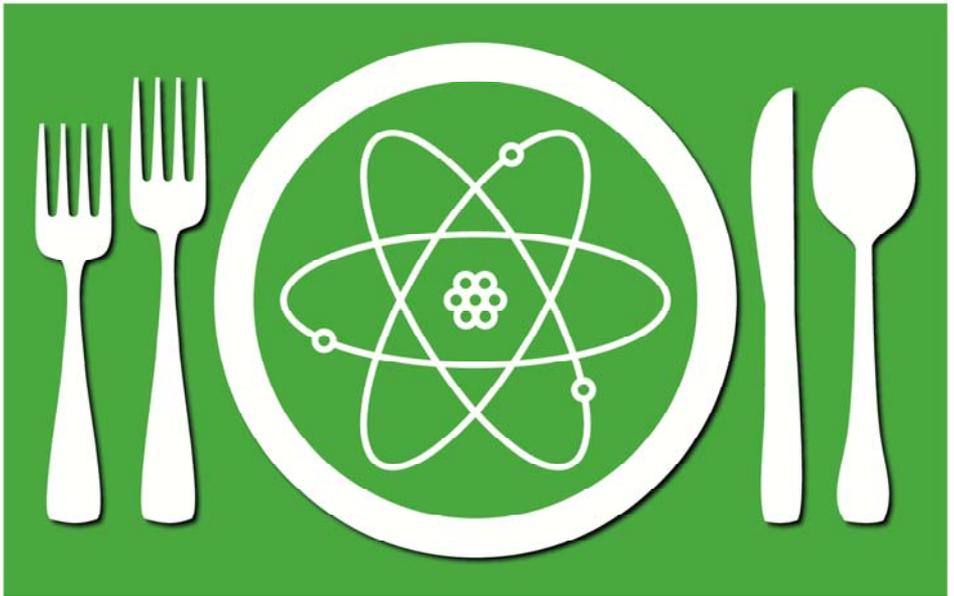

Oakland Unified School District



DINNER
— with a —
SCIENTIST

May 5, 2010, 5-8 pm
Oakland Zoo

Welcome to Oakland Unified School District's second annual Dinner with a Scientist! We are proud to collaborate with 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 converge 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 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
- 5:00 Registration & Live Animal Encounters
- 5:25 Seating (*table # on name tags*)
- Welcome & Ice Breaker
Caleb Cheung, Science Manager, OUSD
- OUSD Welcome
Mary Buttler, Executive Officer, OUSD
- 5:50 Dinner & Conversation with Scientist #1
- 6:20 Keynote Introduction
Randi Meyer, Director of Conservation & Education
- Keynote
Dr. Joel Parrott, Executive Director, Oakland Zoo
- 6:40 Dinner & Conversation with Scientist #2
- 7:10 Raffle
- 7:20 Dessert & Conversation with Scientist #3
- 7:50 Appreciations and Conclusion
-

Menu

Turbulent 530 nm Salad with Various Suspensions & Emulsions
Triticum Globules
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
Bos taurus & Herbaceous Lasagna
Heat-Treated Cacao Carbohydrate Solids

Scientist Biographies*

Joel Parrott

Keynote

Executive Director, Oakland Zoo

drparrott@oaklandzoo.org

Dr. Parrott received his BS and DVM degrees from Colorado State University, Fort Collins, Colorado. Born in the Adirondack region of New York State, Dr. Parrott spent his high school years in Miami, Florida before moving to Colorado to attend college. Upon graduation from veterinary school, he completed an internship at the Denver Zoo and later went into private practice in Castro Valley, California. His specialty is exotic animals and he was a consulting veterinarian for the Oakland Zoo until 1984, when he became the Staff Veterinarian and Assistant Director. A year later, he became the Executive Director at the Oakland Zoo. Dr. Parrott has overseen many new developments at the Zoo in the past twenty five years. An avid conservationist and naturalist, he views the role of zoos as instrumental to environmental education.

Aaron Ramirez

Tables 4, 5, & 6

Graduate Student, UC Berkeley

aramirez4916@berkeley.edu

My father was a middle-school science teacher and instilled in me an insatiable scientific curiosity. In college I was introduced to the research field of plant eco-physiology and began conducting my own research projects as an undergraduate. I am now pursuing a PhD in Integrative Biology at the University of California, Berkeley. I was recently awarded the National Science Foundation Graduate Research Fellowship to continue my PhD work on the evolutionary eco-physiology of native California shrublands.

Amy Gotliffe

Tables 21, 19, & 20

Conservation Manager, Oakland Zoo

amy@oaklandzoo.org

I have a masters degree in ecology and communications. I have been working at the zoo for 8 years where I am responsible for making sure the zoo supports worldwide and local conservation efforts from mountain lions to chimpanzees. I also talk to students and the public about conservation and how each of us can help. I love my job because I know I make a difference to the future of animals.

*Scientist are listed alphabetically by first name

Andrea Goodnight

Associate Veterinarian, Oakland Zoo

Tables 24, 25, & 22

andream@oaklandzoo.org

I have always been fascinated by animals and their environment. As a veterinarian at the Oakland Zoo, I diagnose and treat a wide variety of diseases in captive wildlife. My current field work is in Northern CA, working with biologists at Sonoma State University to understand the ecology and physiology of the Western Pond Turtle. I hope that my work will encourage further multidisciplinary scientific collaboration to benefit animals in the wild.

Andrew WestphalAssociate Director & Senior Fellow,
Space Sciences Laboratory, UC Berkeley

Tables 17, 18, & 16

westphal@ssl.berkeley.edu

I am an astrophysicist working at the Space Sciences Laboratory. I work on the first returned solid samples from beyond the moon -- samples from a comet and samples of interstellar dust from outside our solar system. I am interested in unraveling the early history of the solar system, using clues hidden in primitive extraterrestrial materials.

Candace GiletGraduate Student Researcher,
Lawrence Berkeley National Laboratory

Tables 5, 6, & 4

gilet@berkeley.edu

I am a Graduate Student Researcher working on my PhD in Physics. I use computers to look at thermonuclear burning in Type Ia supernovae, a type of exploding star. Not only do I get to appreciate the visual beauty of supernovae (which are some of the brightest objects in the night sky), I also get to spend time thinking about how it came to be that way through the interaction of nuclear reactions and fluid motions within the star.

Catherine JenkinsResearch Fellow,
Lawrence Berkeley National Laboratory

Tables 8, 9, & 7

cjenkins@lbl.gov

I am currently a fellow at the Advanced Light Source, the synchrotron facility at LBNL, researching magnetism in metals for applications in computer logic, micro-actuators and sensors, and energy transfer and storage. I have a bachelors and masters degree from MIT in Materials Science and Engineering as well as a PhD from UC Berkeley in the same area. I have conducted research in the UK, Singapore, Germany, and Japan.

Chani Sentiwany

Criminalist II,

Oakland Police Department Crime Laboratory

Tables 15, 13, & 14

csentiwany@oaklandnet.com

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.

David G. DeNardo

Postdoctoral Scholar,

Comprehensive Cancer Center, UC San Francisco

Tables 16, 17, & 18

david.denardo@ucsf.edu

I am a postdoctoral researcher in the field of cancer immunology at the University of California, San Francisco. I received my PhD training in Molecular Cell Biology from Baylor College of Medicine. My research is now focused on how the human immune system regulates the progression of malignant and metastatic cancers/tumors. I think the most exciting aspect of cancer research is the possibility of better understanding tumors so that we can develop more effective drugs to enhance the survival and/or quality of life of patients suffering from malignant diseases.

Emily Lindsey

Graduate Student,

UC Museum of Paleontology

Tables 19, 20, & 21

emily.lindsey@berkeley.edu

I became a paleontologist because I wanted to travel, work outside and investigate big questions that impact our world. I study the Pleistocene (Ice Age) extinctions, a time when most of the large mammals on earth -- including woolly mammoths, saber-toothed cats and elephant-sized sloths -- disappeared from the planet. I do research in South America to determine why these animals became extinct and how their extinction affected local ecosystems.

Eve Robinson

Graduate Student, UC Berkeley

Tables 7, 8, & 9
erobinson@berkeley.edu

I am a biomechanics graduate student in the Department of Integrative Biology at UC Berkeley. I research how turbulence over the ocean floor affects bottom-dwelling organisms that feed on plankton. My background in marine science motivated me to ask questions about the impact of water flow and waves on important suspension feeding communities like coral reefs. I have done research in Belize, Australia, and British Columbia. I currently work along the California coast.

Ina ReichelSenior Scientific Engineering Associate,
Lawrence Berkeley National LaboratoryTables 11, 12, & 10
ireichel@lbl.gov

I am a physicist originally from Germany. I did research work for my PhD thesis at CERN in Geneva, Switzerland where I fell in love with particle accelerators. That passion got me to move from Europe to California to work at the Stanford Linear Accelerator Center. For the last eight years I have worked on a number of existing and planned accelerators at LBNL.

Jill FussProject Scientist,
Lawrence Berkeley National LaboratoryTables 2, 3, & 1
jfuss@lbl.gov

I am a Project Scientist in biophysics. As a biochemist/biophysicist, I study how cells protect themselves against damage by sunlight and oxygen, which is important for understanding how normal cells turn into cancer cells. I never liked science classes in high school. It was only when I really got to do science during summers in college that I knew I wanted to be a scientist. First, I started in Environmental Science in Connecticut. Eventually, I received my PhD in Molecular and Cell Biology at University of California, Berkeley.

John Vallerga

Full Research Physicist,
Space Sciences Laboratory, UC Berkeley

Tables 20, 21, & 19
jvv@ssl.berkeley.edu

I am an astrophysicist who graduated from Skyline High School, went to Berkeley as an undergraduate, and acquired a Ph.D. from MIT. I specialize in building UV detectors for telescopes in orbit. Recently, one of our detectors we built in 2003 was installed in the Hubble Space Telescope in its latest NASA servicing mission last May.

Julie Hartell-DeNardo

Lead Zookeeper, Oakland Zoo

Tables 12, 10, & 11
julieh@oaklandzoo.org

I have been a zookeeper for over 8 years and worked in medical science for 5 years before that. I have a BS majoring in Ecology, Evolution Behavior Biology. My work involves all of the details involved in proper animal care such as nutrition, daily husbandry, behavior management, medical care, capture & restraint, and behavior observations.

Lesley Koteles

Team Leader Global Analytical Services,
Chevron Corporation

Tables 9, 7, & 8
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.

Mariska Batavia

Graduate Student, UC Berkeley

Tables 10, 11, & 12
mbatavia@berkeley.edu

I am a third year graduate student in Integrative Biology at UC Berkeley. I study a distinctive mark that rodents form in their teeth when they hibernate, and I want to use that mark to figure out if some extinct rodents and their relatives hibernated. I became interested in science because I love animals and I want to appreciate the natural world.

Melinda Castillo

Environmental Scientist,
Brown and Caldwell

Tables 3, 1, & 2
mcastillo@brwnncald.com

I am an environmental scientist with a bachelor's degree in environmental science from UC Berkeley. I decided to embark in a field that helps businesses minimize their impact on the environment. I currently work at a consulting firm where we can advise companies on how to comply with local, state and federal environmental regulations. I also conduct various types of environmental sampling, including stormwater, groundwater, soil and air quality.

Michele Insanally

PhD Candidate,

Helen Wills Neuroscience Institute, UC Berkeley

Tables 13, 14, & 15

minsanally@gmail.com

I am a PhD candidate in neuroscience at UC Berkeley studying how early life experience changes the brain. Previously, I earned a biology degree at Barnard College/Columbia University where I investigated the effects of stress on the brain. Discussing new ideas with fellow scientists and designing experiments to test those theories was so exciting that I decided to move to California to get a PhD!

Michelle McCombs

Academic Coordinator,

Center for Biophotonics Science and Technology, UC Davis

Tables 6, 4, & 5

michelle.mccombs@cbst.ucdavis.edu

I have a Master's in both Chemistry and Science Education. I currently work for the Center for Biophotonics Science and Technology where scientists are using light to develop medical technologies such as labeling the HIV virus so that it appears green and can be tracked. My specific role is to bring Biophotonics to high school programs. Right now, I work with Sacramento schools and one school in Oakland. As a Center, we hope that our work will further the medical field, and provide non-invasive treatments and detection for many diseases.

Peter J. Kramer

Director of Manufacturing Sciences,
Bayer HealthCare

Tables 25, 22, & 23
peter.kramer.b@bayer.com

I have a BS and BA from the University of Texas at Austin, as well as a MS and PhD from Stanford. A lifelong curiosity with nature and the physical world, plus a strong desire to be on the problem-solving end of human healthcare directed me to a career in science. Now I lead a group of MacGyver-type problem solvers and think I have the coolest job in the world.

Peter Seidl

Physicist, Lawrence Berkeley National Laboratory

Tables 14, 15, & 13
paseidl@lbl.gov

I am an accelerator and fusion energy researcher who has a PhD in physics from the University of Texas at Austin. At Lawrence Berkeley National Lab, I do research aimed toward the development of clean electricity from nuclear fusion. In particular, I work on the development of accelerators to transport and focus very high intensity ion beams.

Roland Gangloff

Visiting Scholar,
UC Museum of Paleontology

Tables 22, 23, & 24
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.

Ryan Ogliore

Postdoctoral Scholar,
Space Sciences Laboratory, UC Berkeley

Tables 23, 24, & 25
ogliore@gmail.com

I am a researcher in astronomy at UC Berkeley. I obtained my Ph.D. in physics from Caltech. I study small samples from a comet that were collected in space by a NASA spacecraft. Studying these samples can tell us how the solar system formed, and even how life on this planet began. My interest in science began at a young age with wildlife and currently my interests span a broad range of science topics.

Todd Doughty

Graduate Student Researcher,
Experimental Cosmology Group, UC Berkeley

Tables 1, 2, & 3
tdoughty1@berkeley.edu

I am a graduate student studying particle astrophysics at UC Berkeley. I am currently working on the CDMS Experiment which is currently the most sensitive direct Dark Matter search in the world. Dark Matter particles, also known as WIMPs, constitute 80% of the matter in the universe and we still don't know what they are. Our experiment uses cryogenic germanium crystal targets deep underground to record the incredibly rare collisions and identify the WIMPs.

Waliana Dieu

Criminalist,
Oakland Police Department Crime Laboratory

Tables 18, 16, & 17
wawong@oaklandnet.com

I have a B.S. degree from San Jose State University with a double major in Molecular Biology and Biological Forensic Science. Currently, I work as a Criminalist at Oakland Police Department Criminalistics Division as a Forensic Drug Chemist. I analyze samples for controlled substances such as Cocaine, Heroin, Marijuana, and Methamphetamine. The results are used to solve crimes.

Participating Schools

Alliance Academy, Barack Obama Academy, Bret Harte MS, Claremont MS, East Oakland School Of The Arts, Edna Brewer MS, Elmhurst Community Prep, EXCEL HS, Explore College Prep, Frick MS, Madison, Madison MS, Mandela HS, Media College Prep, Melrose Leadership Academy, Montera MS, Oakland HS, Oakland International HS, Oakland Technical HS, Roosevelt, Roosevelt MS, Rusdale Continuation, Skyline HS, Street Academy, United For Success Academy, Urban Promise Academy, Westlake MS

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