

# 1 IS THERE LEAD

## Question

Is there lead in our toys?

(Diego Huizar)

## Background

### Things We Learned About Lead

Do you know what lead is? No, good, because I am going to teach you. (Mireyah Lopez)

Today at least four million old houses have kids in them that are being exposed to higher levels of lead. (Mireyah Lopez)

Lead is almost like a rock. (Lizzy Deleon)

Lead is a naturally occurring element found in small places of the earth's crust. It has beneficial uses, it can be toxic to humans and to many animals. (Keano Armijo Harwell)

Did you know that lead is very toxic? (Diego Huizar)

A small amount of lead is safe when it is in your body. Lead is poisonous and if you really sick. (Klarissa Andrade)

Lead poisoning can happen in children.

Lead poisoning (Mireyah Lopez)

Lead poisoning can happen if you don't know it and not show any sign of being

Lead poisoning under six years old, because their

Lead poisoning when they put things in their

Lead poisoning (Isabella Gomez)

Lead poisoning (Angel Salgado)

## Hypothesis

There will be lead in some of our toys.

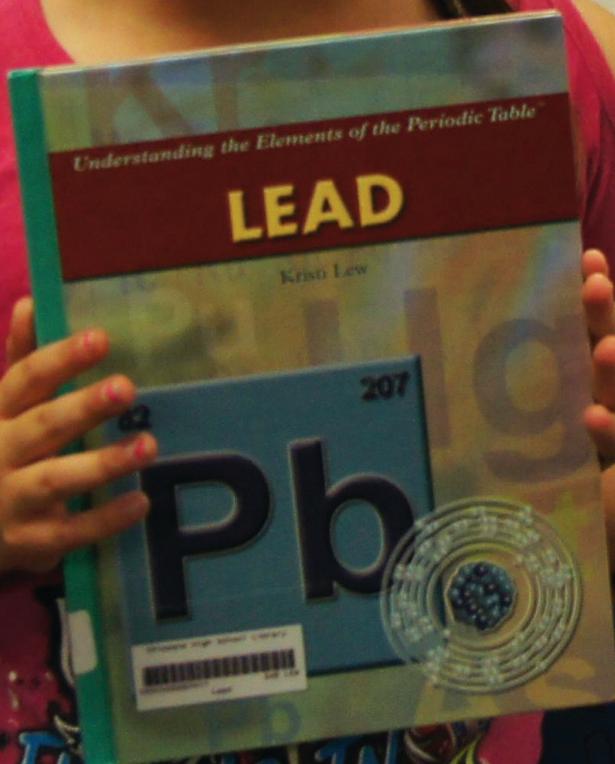
(Arianna Hunt)

## Materials

30 Toys (one student)  
Alcohol Swabs  
Lead Indicator  
Rays

Control

1. Each to swab.
2. The same
3. Our control lead we
4. We took Frost pa
5. All Sample indicato
6. Lead po appear



ACS  
Chemistry for Life®

2014 Progress Report  
AMERICAN CHEMICAL SOCIETY



Dear Friends,

As Chair of the ACS Development Advisory Board, it is my honor to say “Thank you!” to each of you who made personal, corporate and organizational contributions to support the students and teachers impacted by the American Chemical Society’s powerful educational programs.

It is a unique privilege to acknowledge CEO Andrew Liveris and all of the people who comprise The Dow Chemical Company for their \$1 million sole sponsorship as the Founding Partner of the American Association of Chemistry Teachers that launched in fall 2014. This magnanimous new gift and pledge follows Dow’s \$2.5 million sole sponsorship of the 2012 International Chemistry Olympiad. WOW! DOW!

The ACS Scholars Program marks its 20<sup>th</sup> anniversary in 2015. A special anniversary appeal is underway to ensure the continuity of this effective program with an effort to build an endowment that has already attracted nearly \$2 million to help fund the scholarship program in perpetuity. In annual giving, we are delighted to recognize BASF as the newest Sustaining Partner in the ACS Scholars Program with cumulative gifts of more than \$250,000.

It is also an honor to thank our colleague, Madeleine Jacobs, for her demonstrated philanthropy in advancing fundraising for ACS Development efforts during her eleven years as ACS Executive Director and CEO. Madeleine is passionate in her support for the American Chemical Society’s Scholars Program for high-achieving minority students with financial need who aspire to careers in the chemical sciences, and the awe-inspiring, forty-five year old program, Project SEED. We look forward to Madeleine’s continued participation on the Development Advisory Board and her service as Honorary Chair of the Scholars Anniversary Appeal. We wish her all the best in retirement.

Most importantly, it is my sincere pleasure to welcome Dr. Thomas Connelly as the incoming ACS Executive Director and CEO. Tom has had a distinguished career at DuPont where he is retiring after 37 years of service. We look forward to drawing upon his tremendous experience.

In other transitions, we thank Stewart Stabley for his guidance of the ACS Development Office from 2008 until 2014. This period was marked by unprecedented gifts, notably led by the Hach Scientific Foundation’s gift of \$33 million and the major gift of \$2 million from the Ciba Foundation. In addition, we are deeply grateful to John Wiesenfeld for his ten years of leadership as ACS Development Advisory Board Chair. We congratulate Kathy Fleming on her promotion to Director of Development and thank Mary Bet Dobson, Lara Kadylak, Jessica Gosling-Goldsmith and Susan Castro for their outstanding service to ACS and the many beneficiaries of the Society’s flagship programs.

Please accept our sincere appreciation for your generous giving to advance chemistry and develop the next generation of innovators needed for our shared world.

Best personal regards,

A handwritten signature in blue ink that reads "Catherine Sigal". The signature is fluid and cursive, written in a professional style.

Catherine Sigal  
ACS Development Advisory Board Chair

**“Before I learned of Project SEED, I was planning on having a job as a lifeguard that summer. With the stipend, I was thrilled because I could actually do something that I loved.”**

–Julia Gensheimer, Project SEED student and Siemens Competition semifinalist

## PROJECT SEED

Bright, economically disadvantaged high school students receive paid summer internships in research labs working with volunteer scientist mentors through Project SEED. 2014 marked the highest participation of SEED students returning for a second summer of research in the program.



Credit: John Jaques — Pueblo Chieftan

# 86%

of Project SEED students are from families with annual incomes of \$35,000 or less



Credit: Linda Wang, C&EN

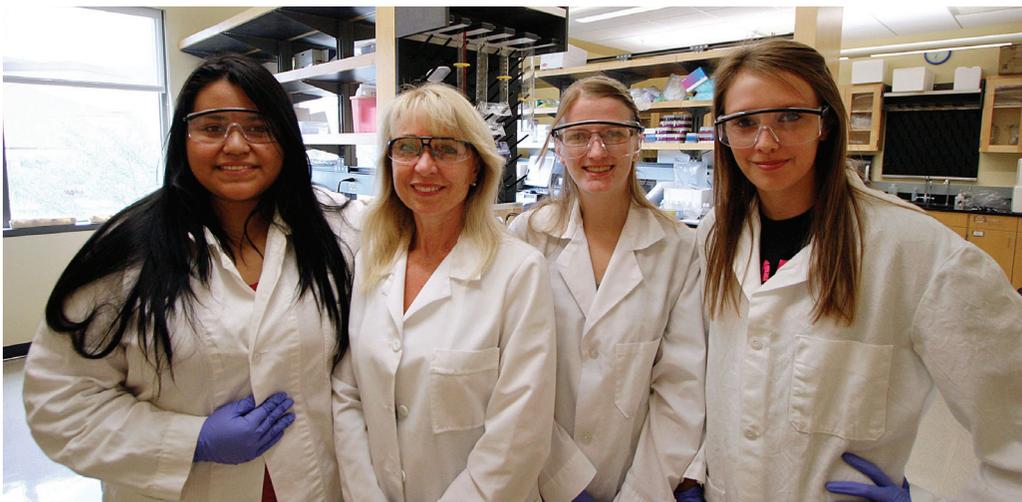
**Above:** Project SEED students conduct research at Colorado State University. **Right:** Henry Ha presents his research to Project SEED Committee Member and mentor Don Warner at an ACS National Meeting. An Alfred and Isabel Bader Scholar, Ha is currently studying Chemical Engineering at Princeton University. **Below:** Project SEED Committee Chair and mentor Anna Cavinato with Project SEED students in her lab at Eastern Oregon University.

# 94%

of Project SEED students agreed that the program helped them decide to continue education after high school

# 423

high school students participated in Project SEED during 2014



### » HOW YOUR DONATION WILL HELP IN 2015

- \$2,500 supports a Project SEED summer research stipend
- \$ 300 supports a Project SEED student during one week of research
- \$ 60 supports a Project SEED student during one day of research

# ACS SCHOLARS PROGRAM

Provides financial assistance, mentoring, research opportunities and networking to talented students with financial need from groups that are underrepresented in the chemical sciences. The 200<sup>th</sup> ACS Scholar earned her PhD in 2014.

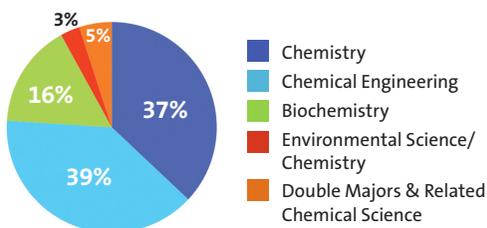


ACS Scholar Sydney Morris performs research at The George Washington University.



ACS Scholars Cherrie Lemon (left) and Trinity Hale (right) enjoy speaking with Dorothy Phillips (second from left) and Etta Gravely (second from right).

## Majors of Current ACS Scholars



# 309

students were awarded scholarships for the 2014-2015 academic year



Credit: Linda Wang, C&EN



Above: ACS Scholar Robyn Smith (second from right) and her family celebrate the program with ACS Director-at-Large Barbara Sawrey (second from left) and ACS Director-at-Large Kathleen Schulz (center). Left: ACS Scholars with long-standing mentor and supporter Zaida Morales Martinez (right).

Credit: Linda Wang, C&EN

## » HOW YOUR DONATION WILL HELP IN 2015

**\$5,000** provides a scholarship for a junior or senior

**\$ 625** provides one month of financial support for a junior or senior

**\$ 150** provides one week of financial support for a junior or senior

**“I sincerely appreciate your past support of the program as it helps many students like me realize their potential and succeed in chemistry. It has been an honor being a Scholar for the past three years. This year I will be the first in my family with a college degree as well as be the first to pursue a PhD.”**

**–Eryn Lee, ACS Scholar, St. Edward’s University**

## Dow pledges \$1 million to augment launch of American Association of Chemistry Teachers



Chemical Marketing and Economics Group Awards luncheon honoring Andrew Liveris, Tom Connelly and Scholars.

“A skilled STEM workforce fuels innovation and economic prosperity and creates solutions that improve the quality of life for people across the globe. At Dow, we value teachers’ critical role, both in inspiring chemistry excitement and in helping students to gain the key skills they need to be successful in STEM careers,” said Andrew N. Liveris, Dow’s chairman and chief executive officer. “As the founding partner of this program, we are proud to collaborate with ACS on this first of its kind community to empower chemistry teachers inside and outside of the classroom as they work to inspire the next generation of innovators and entrepreneurs.”

“Thank you so much for all the work you did to create this amazing site and the resources for middle school chemistry. I teach 7th/8th grade physical science. This year’s focus is chemistry. I don’t have any quality textbooks that are up to date and comprehensive. The lessons you have put together along with the multimedia resources and the laboratory investigations are perfect and cover just the right amount of material. I feel like my students are much more on board with content than they have been in previous years because of the way you have ‘broken down’ the concepts. I cannot thank you enough!”

–Michele Allison, Middle School Teacher

# ADVANCING CHEMISTRY TEACHING (ACT)

Advancing Chemistry Teaching (ACT) supports teacher professional development webinars, workshops, enhanced curriculum development, and expansion of the Science Coaches and ChemClub programs. In 2014 the American Association of Chemistry Teachers (AACT) was launched.

# 2,000

Science Activity Kits *Chemistry's Colorful Clue* were distributed to teachers in 2014



Graduate student Zephen Specht volunteers as a Science Coach in Chula Vista, California.



Science Coach Emil Lazanov introducing a lesson on acids and bases to 7<sup>th</sup> graders in Detroit, Michigan.

# 4 million

visits to the Webby Award-winning ACS website of free online resources for middle school students and teachers since its launch

[www.middleschoolchemistry.com](http://www.middleschoolchemistry.com)

**300**  
classrooms received Science Coach support and 24 volunteers were on the waiting list in 2014



Above: ChemClub outreach event in Tucson, Arizona.  
Left: Science Coach Emily Satkiewicz presenting to high school students.

## » HOW YOUR DONATION WILL HELP IN 2015

**\$5,000** provides ten teachers with leadership training

**\$ 500** gives materials for a classroom supported by a Science Coach

**\$ 100** provides three Science Activity Kits

## WAYS TO DONATE

Today's students are tomorrow's innovators. Provide the opportunity for a young person to follow your path in the field of chemistry. Your donation directly supports students and teachers in the chemical sciences—providing research stipends, awarding scholarships and facilitating teacher workshops.

### Monthly Donation

Donate online at [www.acs.org/donate](http://www.acs.org/donate) and select a program to support for up to 12 months.

### Donation in Honor or Memory of Someone Special

Make a donation in honor or memory. Select one of our Ecards or have a card mailed on your behalf when you make an honorific or memorial donation online. These esteemed individuals are recognized in the ACS Annual Report.

### Securities

Build your donation with a gift of appreciated stock. Call the ACS Development Office to transfer stock for your contribution.

### Legacy Planning

Tailor a donation to meet your financial and charitable goals. Donors who include the American Chemical Society in their estate plans are named ACS Legacy Leaders. Visit [www.acs.org/legacy](http://www.acs.org/legacy) to access free estate planning resources and find a full list of benefits for ACS Legacy Leaders.

### Contact

Personalize your donation by contacting a member of the ACS Development Office at **800.227.5558, ext. 6210** or [donate@acs.org](mailto:donate@acs.org).

Mary Bet Dobson

*Major and Planned Gifts*

Kathy Fleming

*Corporate and Foundation Gifts*

Lara Kadylak

*Annual Gifts*

ACS is designated as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code. The American Chemical Society Federal Tax ID Number is 53-0196572.



**AMERICAN CHEMICAL SOCIETY**

Credit: Linda Wang, C&EN



Chemical Abstracts Service retiree Ronald Khouw and his wife, Petta, are recognized as ACS Legacy Leaders by Madeleine Jacobs.

ACS donors Robert Lichter, Matthew Chan and John Adams enjoy summer research presentations at the Project SEED reception.



Credit: Linda Wang, C&EN

Credit: Linda Wang, C&EN



ACS Legacy Leaders Gerry Meyer and former ACS President Helen Free greet each other at the Senior Chemists Breakfast where they were recognized for including ACS in their estate plans.

BASF becomes a Sustaining Partner with cumulative gifts of \$250,000 to the ACS Scholars Program. BASF Chief Diversity Officer Patricia Rossman (center) celebrates with two ACS Scholars, Hakeem Yusuff and Kristen Allison, employed at BASF.



Credit: Linda Wang, C&EN