

# Akron Section-ACS Project SEED Summer 2009 Summary Report



*2009 Akron-ACS Project SEED participants, left to right:*

*Amy Gao  
Jasmine Monson  
Dioswal Johnson  
Christian Mayfield  
Duaa Almahd  
Latoya Higginbottom  
Kat Baldwin  
Stephen Campbell  
Charles Gordon  
Goran Martic*

## What is Project SEED?

Project SEED is a program administered by the American Chemical Society that offers a unique opportunity to spend a summer conducting hands-on research with a scientist in a laboratory setting. Project SEED programs are initiated and hosted by research institutions (academic, government, or industrial laboratories). Students work 8-10 weeks and are awarded a \$2,800 fellowship. Students who satisfactorily complete the first summer and who have not yet entered college may return for a second summer of research and receive a \$3,300 award. Because of the design of the research projects and the close mentoring relationship between student and scientist, the program has had a very positive influence on students.

Project SEED students must be recognized as economically disadvantaged. Preference is given to students whose maximum family income is below \$34,340 or does not exceed 200% of the Federal Poverty Guidelines for family size, and who may be encouraged by their work in a chemical laboratory to make better use of their capabilities. An economically disadvantaged student applicant who is physically disabled must be considered on the same basis as any other applicant and may not be discriminated against in any way. Certain exceptions to these income guidelines may be made when other factors that would discourage consideration of a career in science are present.

## 2009 Akron-ACS Project SEED Hosts

Project SEED students worked with mentors at the following locations in Summer 2009:

- The University of Akron
  - Department of Chemistry
  - Department of Chemical Engineering
  - Department of Polymer Science
  - Department of Polymer Engineering

## Akron-ACS Project SEED Supporters

Akron Section-ACS is indebted to the following for providing financial support and/or services:

- The University of Akron
  - Department of Chemistry
  - Department of Chemical Engineering
  - Department of Polymer Science
  - Department of Polymer Engineering
  - Center for Career Management: LuAnn Linson Coldwell
  - Department of Occupational & Environmental Health and Safety: Alex Stakleff
  - Upward Bound in Mathematics and Science: John Vesalo
  - Honors College: Adam Smith
  - Department of Geology: Tom Quick
  - Zip Card Office: Patty Chapman
  - Tech Learning Support Center: Holly Mothes
- Goodyear
  - Michael Rachita, Jennifer Labbe, Bob Woloszynek, & Ed Johnson
- OMNOVA Solutions Foundation (also a national Project SEED supporter)
- American Chemical Society

## Summer 2009 Akron-ACS Project SEED Students and Mentors

	<b>Student/School</b>	<b>Research Mentor(s) &amp; Associates</b>	<b>Project Title</b>
Summer II Students	Stephen Campbell Firestone High School	Dr. George Newkome Dr. Sujith Perera	Synthesis and Characterization of Terpyridine for Photochemical Applications and Self-Assembly Hexameric Architectures
	Amy Gao Firestone High School	Dr. Bi-Min Zhang Newby Akhila Raya, Will He, & Maysam Sodagari	Initial Bacterial Attachment of Escherichia coli in Biofilm Formation using a Flow Chamber System
	Charles Gordon Firestone High School	Dr. Mark Soucek	Modification of Shellac with a Fatty Acid
	Goran Martic Garfield High School	Dr. Chris Ziegler	Creation of 2-Aminopyridine and Diiminoisoindoline Ligand
	Jasmine Monson Garfield High School	Dr. Chrys Wesdemiotis Vincenzo Scionti & Beth Subel	Ion Mobility
Summer I Students	Duaa Almahd Firestone High School	Dr. Jun Hu	Development of a Color Test for Poison Ivy
	Kat Baldwin North High School	Dr. David Perry	Endohedral C <sub>80</sub> Complexes
	Latoya Higginbottom Garfield High School	Dr. David Modarelli Wongwit Wongwitwichote	Synthesis and Preliminary Photophysical Properties of Charge Transfer Complex Between Pyrene Liquid Crystal and p-Chloranil
	Dioswal Johnson Firestone High School	Dr. Darrell Reneker & Dr. Connie Hubbard	Comparing Nanofibers of Different Polymer Solutions and Concentrations
	Christian Mayfield Sandy Valley High School	Dr. Ed Evans Aaron Drews, Chris Dennison, Allison Lantham, & John Hoffman	Fibrous Materials & Reinforced Ceramic Composites

## This Summer's Activities

Students in the Akron-ACS Project SEED program visited the chemical facilities of Goodyear in Akron. Ms. LuAnn Linson Coldwell of the University of Akron's Center for Career Management presented information on chemistry careers and led a discussion over lunch. Mr. Adam Smith of UA's Honors College and Dr. David Perry, Akron-ACS Chair and Project SEED research mentor, met with the students over a continental breakfast to discuss college applications and scholarship opportunities. Mr. Alex Stakleff of UA's Office of Environmental and Occupational Health and Safety met with the students and mentors on the first day of the program to discuss safety issues.

On the last day of the program, students enjoyed a pizza and ice cream party followed by poster presentations of their research. The poster session was attended by numerous UA faculty and students, representatives of the dean's office and Upward Bound, and other guests.

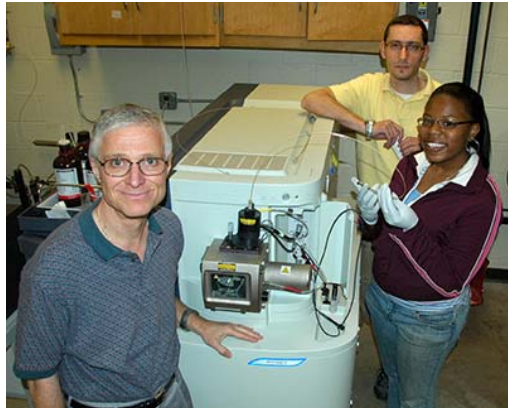
Friday, June 12	Opening meeting & safety discussion, followed by Lunch: 10:00am, KNCL 401
Friday, June 26	Lunch & discussion of careers in chemistry (w/Ms. LuAnn Coldwell, UA CCM) 11:30am, KNCL 401
Friday, July 3	UA <u>closed</u> for Independence Day holiday.
Monday, July 6	Draft of interim report due to research mentor.
<b>Friday, July 10</b>	<b>Interim report due to Dr. Donovan (first payment released after submission of satisfactory report)</b>
Wednesday, July 22	Tour of Goodyear Chemical facilities: Meet at KNCL 401 at 12:30pm
Wednesday, August 5	Discussion of college applications & opportunities (w/Dr. David Perry, Project SEED mentor & Chair, Akron Section-ACS, and Mr. Adam Smith, Director, Choose Ohio First STEM Scholars and Nationally Competitive Scholarships & Fellowships, The University of Akron): 9:00am, KNCL 401
Monday, August 10	Draft of final report due to research mentor.
<b>Friday, August 14</b>	<b>Final report due to Dr. Donovan (second payment released after submission of satisfactory report; 3-5 pages is adequate)</b>
Friday, August 14	Pizza Party and Ice Cream! 1:00pm, KNCL 401 Research Poster Session 2:00pm, KNCL 401
<b>Friday, August 28</b>	<b>Student Survey due (online at ACS web site). (final payment released after completion of survey and receipt of final report by ACS; final check mailed to student)</b>

### Payment schedule

	Summer I students	Summer II students
July 10	\$1,150	\$1,400
August 14	\$1,150	\$1,400
after August 28	\$500	\$500
<b>TOTAL</b>	<b>\$2,800</b>	<b>\$3,300</b>

## The Future of Akron-ACS Project SEED

Project SEED depends on support in large and small amounts from donors. Support from industrial partners is key to continuing our success. Information on Project SEED is available from the national ACS office and from our local section; contact information is provided below.



Dr. Chrys Wesdemiotis, Vincenzo Scionti, and SEED student Jasmine Monson.  
(photo credit: UA Institutional Marketing)



SEED students Kat Baldwin and Charles Gordon with LuAnn Coldwell of UA's Center for Career Management (center).



SEED student Dioswal Johnson (right) explaining her research to UA chemistry faculty Dr. Tom Leeper and Dr. Claire Tessier.  
[Dr. Tessier is an alumna of Project SEED.]



SEED student Duaa Almahd describing her research to Dr. Charles Monroe, Associate Dean of UA's College of Arts and Sciences.

### National

Project SEED  
American Chemical Society  
1155 Sixteenth Street NW  
Washington, DC 20036  
(800) 227-5558 ext. 4380 or (202) 872-4380  
projectseed@acs.org  
www.acs.org/education/

### Local

Dr. Bill Donovan  
Akron Section-ACS Project SEED coordinator  
Department of Chemistry, The University of Akron  
Akron, OH 44325-3601  
(330) 972-6064  
wdonovan@uakron.edu  
www.akronacs.org or  
www2.uakron.edu/genchem/SEED/

More photos from the poster session are posted at [www2.uakron.edu/genchem/SEED/](http://www2.uakron.edu/genchem/SEED/).