

CHICAGO AREA Undergraduate Research Symposium

April 02, 2011
**Museum of Science and Industry
Chicago, Illinois**



Introduction

The American Undergraduate Research Society (AURS) is proud to present the Chicago Area Undergraduate Research Symposium, an annual event held each spring that allows hundreds of undergraduates from five outstanding Chicago area universities the opportunity to present their research in a professional setting. Any undergraduate student conducting research in any field, from humanities and social sciences to physical and biological sciences, are invited to submit an abstract and present their research.

CAURS provides an excellent opportunity for students to learn about the research of their peers, speak to the attending university faculty, interact with industry and fellowship representatives, and receive both wisdom and inspiration from our invited speakers. This unique event is a student run collaboration between The University of Chicago, Loyola University Chicago, DePaul University, Northwestern University, and Illinois Institute of Technology. Students from many other institutions such as Lake Forest College, University of Illinois Chicago, University of Michigan-Ann Arbor and the City Colleges of Chicago also presented their research projects at the 2011 Chicago Area Undergraduate Research Symposium

Host School and Location

The 7th Annual Chicago Area Undergraduate Research Symposium was held on April 02, 2011 at the Museum of Science and Industry and hosted by the University of Chicago. The Museum of Science and Industry located in Chicago's Hyde Park neighborhood is one of the largest science museums in the world. It is home to over 35,000 artifacts and over 14 acres of interactive exhibits, The Museum of Science and Industry is a staple of Chicago education and tourism.

This year's poster and oral presentations were held in the Museum's West Pavilion. The oral presentations were held in the Museum's 800-person Auditorium while the posters were being presented in the main space of the West Pavilion. Roundtable discussions with snacks were held in the wings of the West Pavilion. Dinner and keynote address were held in the Museum's majestic Rotunda. Students and faculty ate dinner amongst the Science Storm and Transportation Galleries.



CHICAGO AREA UNDERGRADUATE RESEARCH SYMPOSIUM

April 02, 2011

11:30 a.m.	Registration <i>Ticketing Lobby, Museum of Science and Industry</i>
12:00 p.m.	Opening Address <i>Auditorium</i> <i>John W. Boyer, Ph.D.</i> <i>Dean, The College, University of Chicago</i>
12:30 p.m.	Poster Viewing <i>West Pavilion</i>
1:00 p.m.	Presentation Session I <i>Poster Presentations: West Pavilion</i> <i>Oral Presentations: Auditorium</i>
3:00 p.m.	Roundtable Discussions and Snacks <i>West Pavilion</i>
4:00 p.m.	Presentation Session II <i>Poster Presentations: West Pavilion</i> <i>Oral Presentations: Auditorium</i>
6:00 p.m.	Reception, Banquet Dinner, and Awards Ceremony <i>Rotunda</i> <i>Keynote Address by John Cacioppo, Ph.D.</i> <i>University of Chicago</i>



Event Overview

The 2011 Chicago Area Undergraduate Research Symposium was held on April 02, 2011 at the Museum of Science and Industry. Over 250 undergraduates from several institutions presented over 230 research projects as poster presentations and 16 oral presentations in the fields of biology, chemistry, physics, social sciences, psychology, humanities, and engineering. Many faculty members, graduate students, and postdoctoral fellows from both participating and affiliate institutions generously donated their time to judge these poster and oral presentations.

John Boyer, Ph.D, Dean of The College of the University of Chicago, gave the opening address to begin the conference. Immediately after the opening address, students had an opportunity to view each other's posters during the poster viewing session. Presentation Session I, immediatey following the Poster Viewing Session, featured one half of the poster presentations and two sessions or oral presentations, Biological Science and Social Science/ Humanities. The oral presentations featured four students from each discipline. Each oral presentations lasted 15 minutes each and ran simutaneously with the poster session. Once Presentation Session I concluded, presenters and judges enjoyed a snack break with Round-table Discussions. Many participants also used this time to explore the museum.

Following the Roundtable Discussions, the second Presentaiton Session featuring the remaining posters as well as Physics/ Engineering and Chemistry oral presentations began. After the two hour session and the Museum had closed to the public, students and judges were escorted to the Museum's Rotunda where they enjoyed dinner, a compelling keynote address by Dr. John Cacioppo, and award ceremony.

Roundtable Presenters

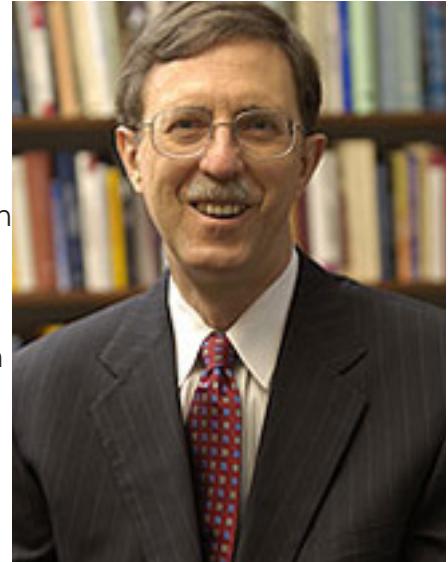
Meet the Medical Students, Terrance Lee and Monica Tang, Northwestern University
Opportunities in Chemistry: Dr. Charles Cannon, American Chemical Society
American Chemical Society: Keith Kostecka, American Chemical Society
Applying to Graduate School: Deborah Neibel, University of Chicago
Fulbright Scholar Program: Dr. Stephen Hill, Northwestern University
Meet the Speaker: Dr. John Cacioppo, The University of Chicago
British Fellowships, Chandler Robinson, Northwestern University

GUEST SPEAKERS

John W. Boyer, Ph.D., The University of Chicago

Dean, The College
Opening Address

John W. Boyer, the Martin A. Ryerson Distinguished Service Professor in History, was appointed to a fourth term as Dean of the College in 2007. He became Dean of the College in 1992. A specialist in the history of the Habsburg Empire and of Central Europe in the nineteenth and twentieth centuries, Boyer received his Ph.D. from the University of Chicago in 1975 and joined the faculty in the same year. Boyer has written three books, including Political Radicalism in Late Imperial Vienna: Origins of the Christian Social Movement, 1848-1897 (for which he was awarded the John Gilmary Shea Prize); and Culture and Political Crisis in Vienna: Christian Socialism in Power, 1897-1918 (for which he was awarded the Ludwig Jedlicka Prize), both of which were published by the University of Chicago Press. His most recent book is Karl Lueger (1844-1910). Christlichsoziale Politik als Beruf, published by the Böhlau Verlag in Vienna in 2010. Boyer was also co-general editor of the nine-volume University of Chicago Readings in Western Civilization. In 2004 Boyer was awarded the Cross of Honor for Science and Art, First Class, by the Republic of Austria, in recognition of his scholarly work on the history of the Habsburg Empire. He received the 2006 Austrian State Prize for Modern History.



John Cacioppo, Ph.D., The University of Chicago

Tiffany and Margaret Blake Distinguished Service Professor of Psychology
Keynote Speaker

This year's keynote address will be given by Dr. John Cacioppo. Dr. Cacioppo is a pioneer in the field of social neuroscience and an expert in social isolation, emotional contagion, and social behavior. He is the Tiffany and Margaret Blake Distinguished Service Professor of Psychology, Director of the Center for Cognitive and Social Neuroscience, and Past-Director of the Arete Initiative of the Office of the Vice President for Research and National Laboratories at The University of Chicago. Dr. Cacioppo completed his PhD at Ohio State University and served on the faculty at the University of Notre Dame (1977-1979), University of Iowa (1979-1989), Ohio State University (1989-1999), and University of Chicago (1999-present). He also served as the Bijzonder Hoogleraar Sociale Neurowetenschappen (External Professor Chair in Social Neurosciences) Free University Amsterdam (2003-2007), and a Guest Professor at State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University (2008-2010). He is a Past-President of the Association for Psychological Science (2007-2008), the Society for Psychophysiological Research (1992-1993), the Society for Consumer Psychology (1989-1990), the Society of Personality and Social Psychology (1995), and he is currently the Chair of the Psychology Section of the American Association for the Advancement of Science and the President-Elect of the Society for Social Neuroscience.





Presentation Awards

Top poster and oral presenters were recognized and awarded plaques and grant money for outstanding presentations. Each poster and oral presentation was judged by distinguished faculty members from the participating universities, based on their scores, the following students were presented with the following awards:

Top Presenters from Each Institution

Bo Shiun Lai, The University of Chicago

Aminah Hussaini, Illinois Institute of Technology

Illysha Minor, DePaul University

Milot Thaqi, Loyola University Chicago

Abbey Thompson, Northwestern University

Aimee Bobko (University of Illinois at Chicago), Affiliate Institution*

Top Presentations from Each Discipline

Biological Sciences: Lucas Tian, University of Chicago

Chemistry: Jared Isaacs, DePaul University

Physics/Mathematics/Engineering: Sophia Pilipchuk, Illinois Institute of Technology

Social Sciences/Humanities: David Showalter, University of Chicago

Top Poster Presentation

Nadrine Omar, DePaul University

Top Oral Presentation

Jay Patel, Northwestern University

Top Overall Presentation

Brandon Ng, Northwestern University

*Affiliate institutions are participating schools that do not sponsor CAURS. This year, this award only includes students from the Chicago Community Colleges, University of Illinois at Chicago, Lake Forest College, and University of Michigan.

InterSchool Board

DePaul University
 Stephanie Reeve*
 Jenna Torbeck
 Kelly Mueller
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Northwestern University

 Victoria Simek
DePaul University

Loyola University Chicago
 Jeffrey Heiferman
 Lacy Simon
 Kelly Brandstert
 Jacklyn Moloney

*Event Directors

Summary of Participation

CAURS would not be possible without student and professor participation. Below is a summary of the event's participants:

University of Chicago:

Student Presenters: 52
 Faculty Judges: 45

Illinois Institute of Technology

Student Presenters: 10
 Faculty Judges: 8

DePaul University

Student Presenters: 36
 Faculty Judges: 11

Loyola University Chicago

Student Presenters: 50
 Faculty Judges: 6

Northwestern University

Student Presenters: 41
 Faculty Judges: 19

Affiliate Institutions

Student Presenters: 35
 Faculty Judges: 13



Acknowledgements

The Chicago Area Undergraduate Research Symposium would not have been possible without the help of countless people at all participating institutions. In particular, we would like to thank the following individuals for their help and support:

DePaul University

Rev. Dennis H. Holtschneider, C.M., President
Charles Suchar, Dean, College of Liberal Arts and Science
Dr. Lynn Narashiman, Associate Dean, College of Liberal Arts and Science
Victoria Simek and the Interdisciplinary Science and Technology Center
Dr. Richard Niedziela and the Department of Chemistry

Illinois Institute of Technology

Allan S. Myerson, Ph.D, P.E., Provost and Senior Vice President

Northwestern University

Morton O. Shapiro, Ph.D., President
Ronald Braeutigam, Ph.D., Office of the Provost
Michelle Bledsoe and the McCormick Office of Career Development
Northwestern University Office of Fellowships

Loyola University Chicago

Rev. Michael J. Garanzini, S.J., President
John Pelissero, Ph.D., Interim Provost
Pankti Thakkar and Club PCR

University of Chicago

Robert J. Zimmer, Ph.D, President
**The Institute for Biophysical Dynamics and Graduate Program
in Biophysical Sciences**

Corporate Sponsors

The Chicago Area Undergraduate Research Symposium would also like to acknowledge the following corporate sponsors:

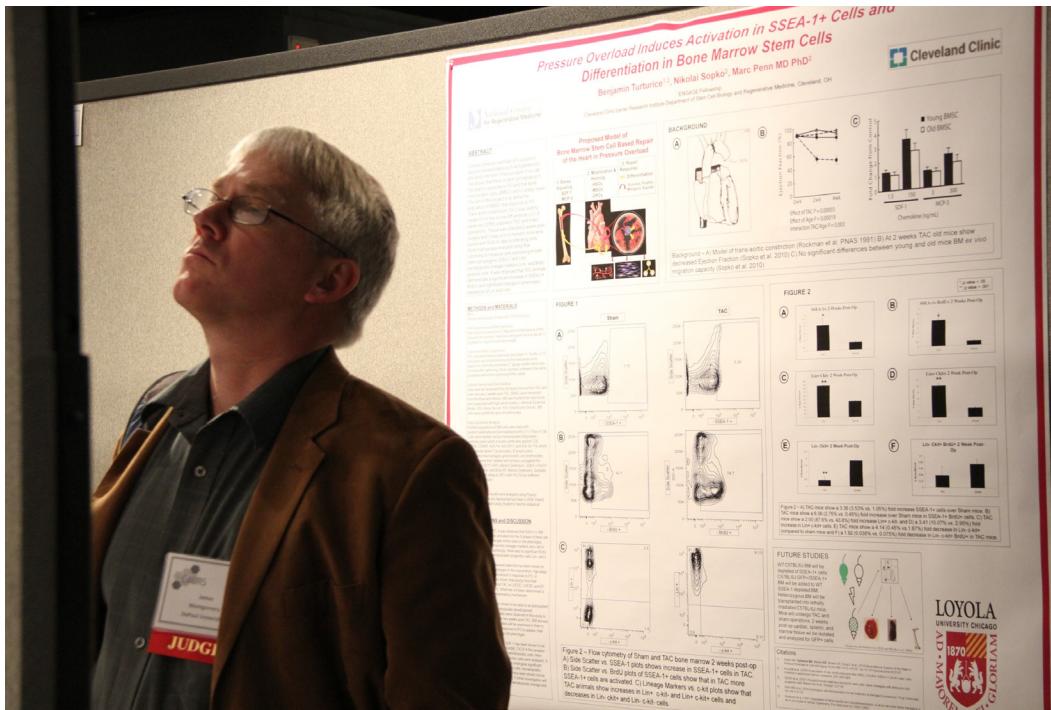
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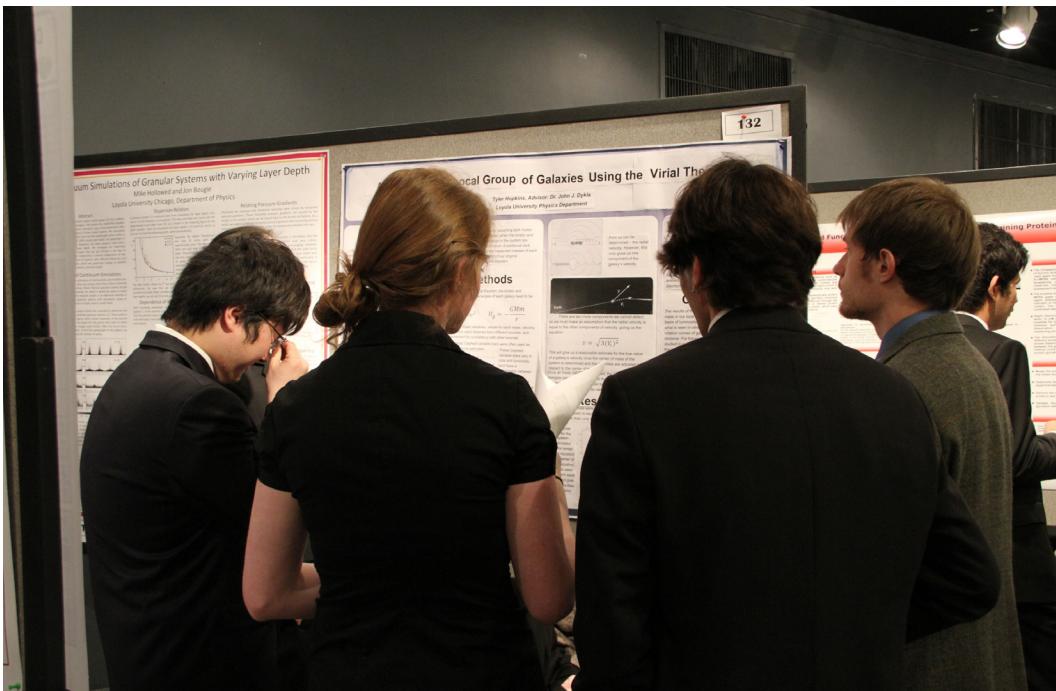
Event Photos



Opening Address by Dr. John Boyer, Dean of the College, University of Chicago

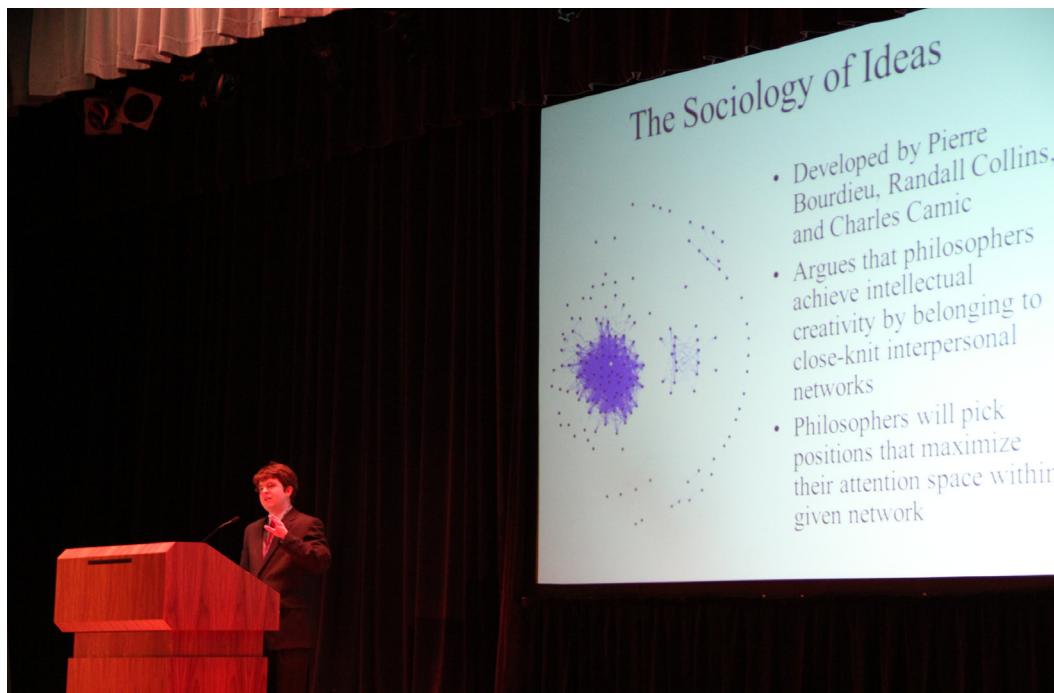
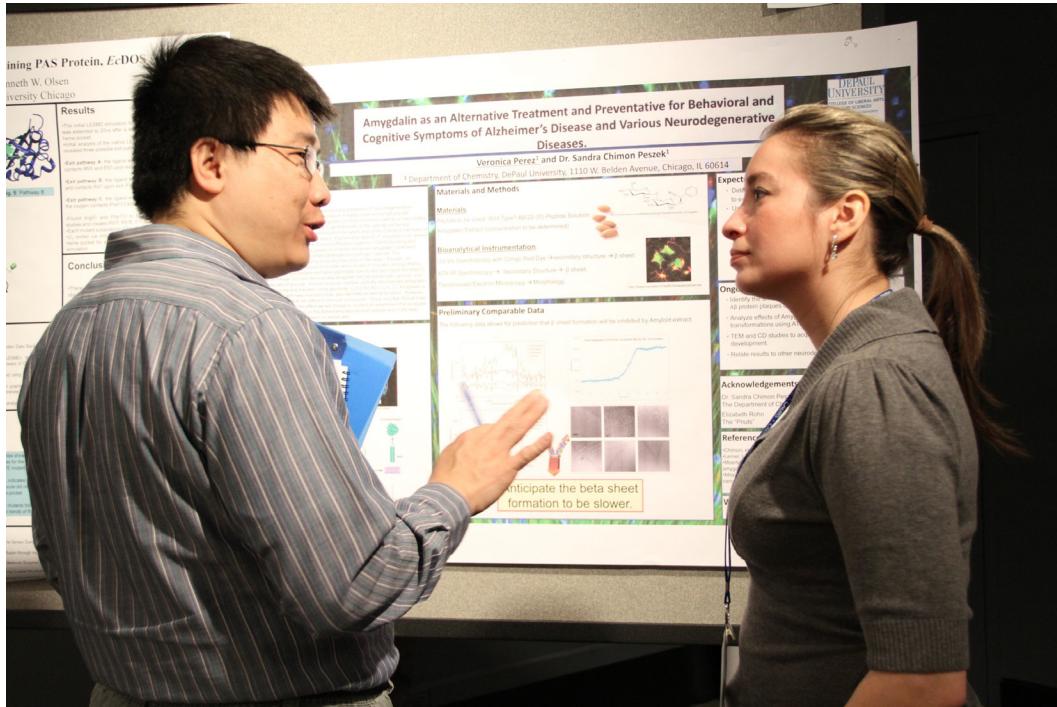


All Photos by Denise Martinez







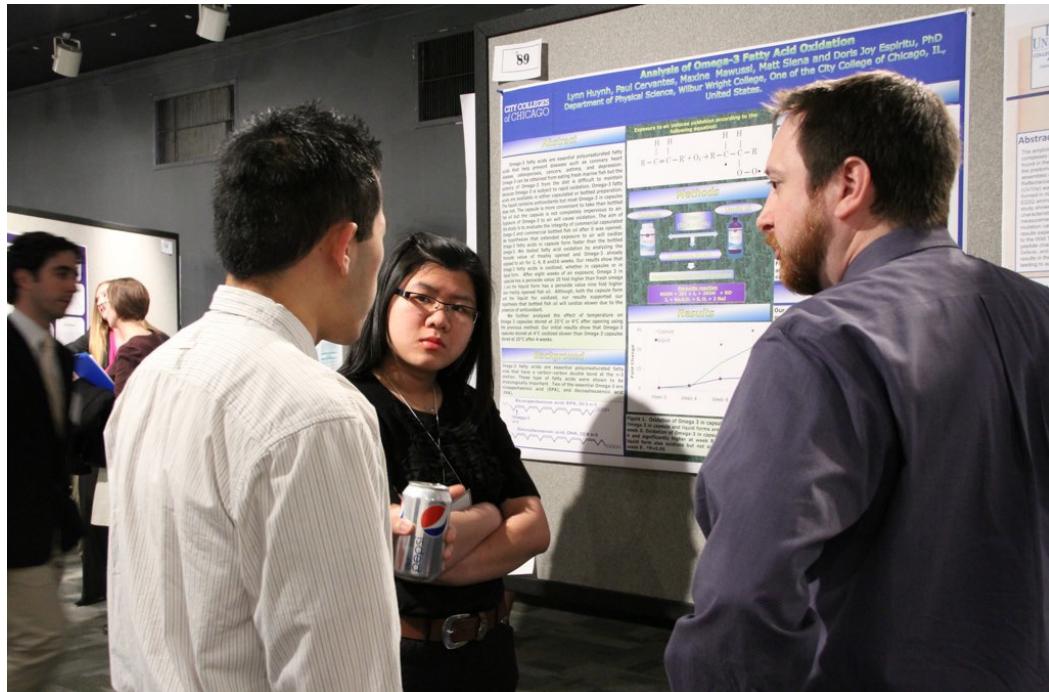
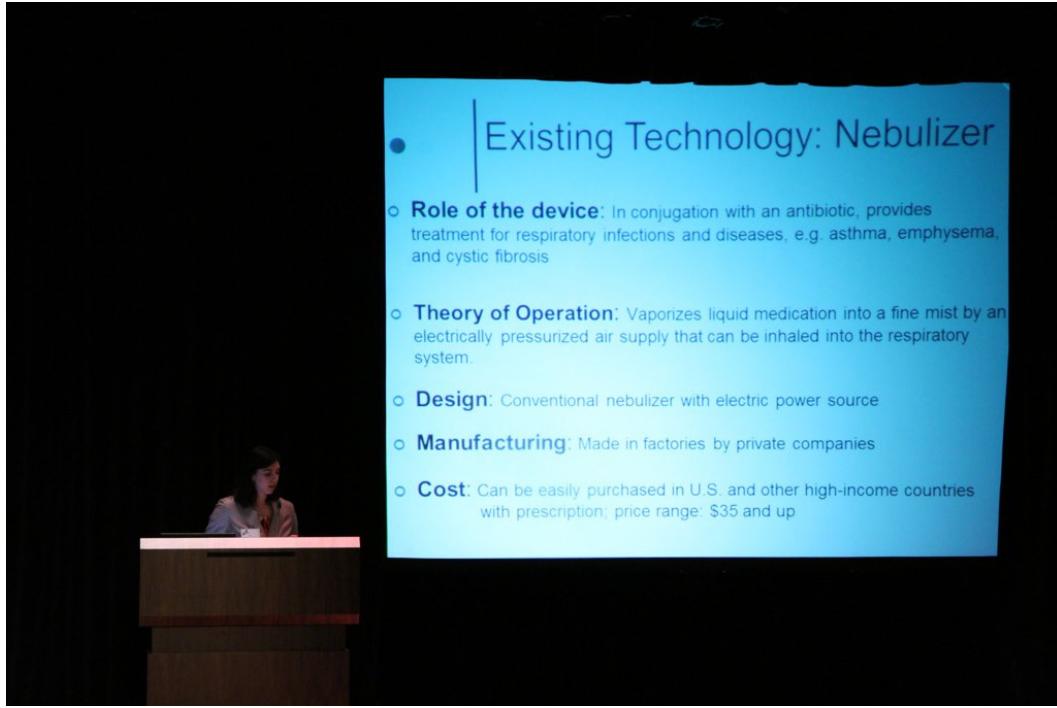


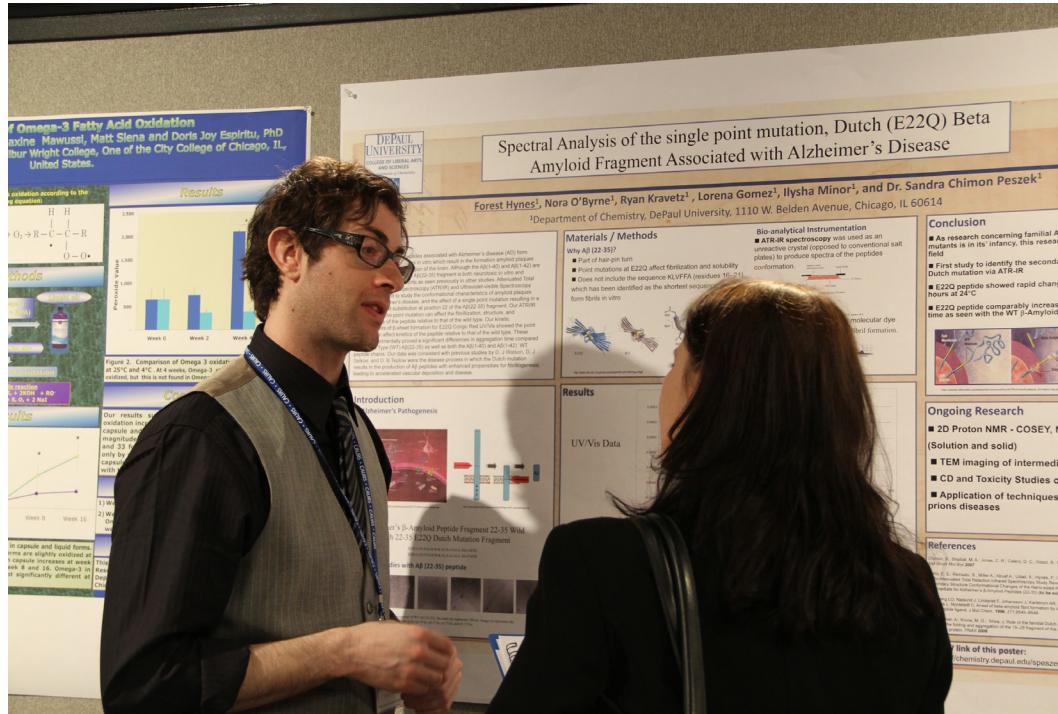














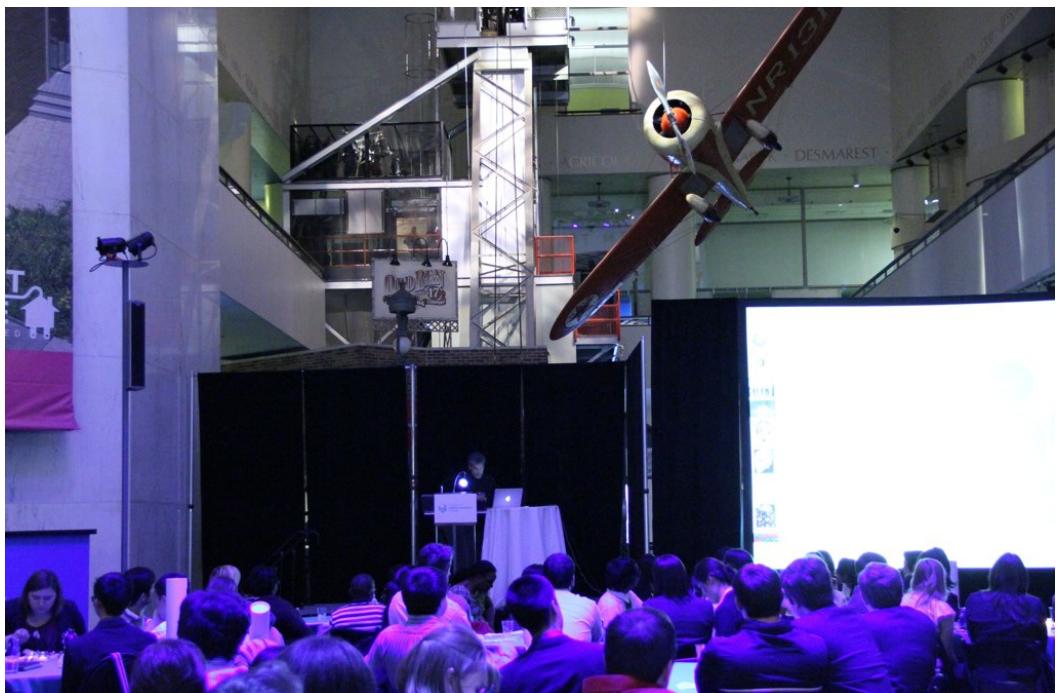
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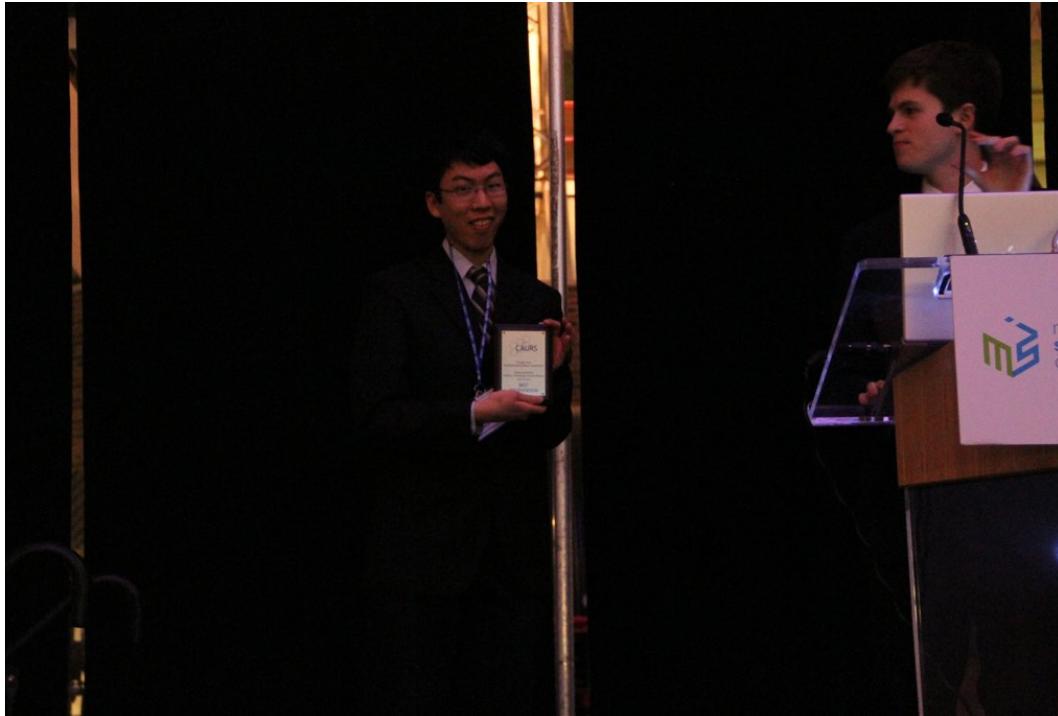
Board Member Stephen Xue introducing Keynote Speaker



Keynote Address by Dr. John Cacioppo, University of Chicago







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