

Harper College Undergraduate Research

Department of Chemistry
William Rainey Harper College
18 October 2010

Challenges

- *Consortium to Create a Community College Undergraduate Research Center:* Partners Northwestern University, Oakton College and Harold Washington College.

NSF \$3,000,000 Not Funded January 2004

- *Building a Culture of Scientific Inquiry at Community Colleges – Prototypes for a National Model:* Partners Northwestern University and Harold Washington College.

NSF \$500,000 Not Funded Spring 2005

Success

- *Collaborative Research: 2YC-REU: Two-Year College Research Experience for Undergraduates Site: Partners Harold Washington College.*

NSF CHE Award 0539816 \$100,000

Fall 2005

- *Exploring New Models for Authentic Undergraduate Research with Two-Year College Students : Partners The City Colleges of Chicago, Oakton College and The College of DuPage.*

NSF CHE Award 0629174 \$2,700,000

Fall 2006

Instrumentation

- NMR and IC were obtained with \$190,000 of external grant money.

NSF-CCLI Award 0633315 \$145,000

Spring 2007

- Approximately \$110,000 was used for GC/MSs and HPLCs with a purchase value greater than \$300,000.

Center of Excellence \$110,000

Fall 2008

Student Benefits

- Approximately half of our students have participated in summer research programs.
- All of the students that have participated in the research program have gone on to pursue a four year degree in a STEM discipline.
- In the last four years, our research students have earned over \$300,000 worth of scholarships to transfer institutions.
- Several former students are currently in STEM graduate programs and medical degree programs.
- Chemistry students in all course use the instrumentation.

The Future

- Initiating Undergraduate Research at Community Colleges
Team Members: Judy Marwick, Roger House, David Clydesdale
and Sam Levenson October 2010
- STEM Learning Communities at the City Colleges of Chicago: The
Role of Community in Degree Completion
NSF Submitted \$2,000,000 Fall 2010
- Building a culture of undergraduate research throughout
campus