

CWCS PROJECT DISSEMINATION: ARTICLES AND CONFERENCE PRESENTATIONS

Several papers in peer-reviewed journals have resulted from CWCS workshops. The Program has also sponsored symposia at a 2003 regional ACS meeting in Atlanta, at the 2004 Biennial Conference on Chemical Education, and at the 2004 national ACS meeting in Philadelphia. The symposia featured presentations by both CWCS personnel and by former workshop participants. Presentations have also been made by various CWCS personnel at other meetings.

Publications Derived from CWCS Activities

1. "Allele-Specific PCR-Based Genotyping of a Normal Variation in Human Color Variation", B. Wilson, I. Lubin, & K.B. Grant, *Journal of Chemical Education* **2003**, *180*, 1289-1291.
2. "Teaching Process Analytical Chemistry", J.P. Chauvel, W.W. Henslee and L.A. Melton *Analytical Chemistry* **2002**, *74*, 381.
3. "A Participant-Oriented, Research-based Approach for Design of a Biochemistry Workshop for Faculty at Undergraduate Institutions", *Biochemistry and Molecular Biology Education* **2005**, *33*, 269-273.
4. "The Art of the Chemistry of Art", L. Biemiller: Notes From Academe, *Chronicle of Higher Education*, April 25, 2003

Southeastern Regional Meeting of the American Chemical Society (SERMACS): CWCS Symposium Presentations, November 2003

5. "The Chemical Workshops in the Chemical Sciences (CWCS): An Overview (<http://chemistry.gsu.edu/cwcs>)", J. Smith, E. Breyer, D. Collard, and L. Kaplan, presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16-19, 2003.
6. "Forensic Chemistry: An Example of a Successful CWCS Workshop, Lawrence Kaplan, , presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16-19, 2003.
7. "Turning Them on to Chemistry and Art: Two Perspectives on a Successful Workshop, Patricia Hill and Richard Hark, presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16-19, 2003.
8. "Academic-Industrial-CWCS Cooperation for Workshops. Lynn Melton, Walter Henslee, Robert Ford, presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16-19, 2003.
9. "NSF Programs that Support Undergraduate Education", Elizabeth Dorland, John Dwyer, and Susan Hixson, , presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16-19, 2003.

10. "RSEC Experiences at the University of Tennessee: A View from the Trenches", Kimberly Frederick, S. Gilman, presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16-19, 2003.
11. "Faculty Development in Chemical Education and Research through Partnership with Georgia Tech; A NSF-Supported RSEC", E. Barefield and A. Leavitt, presented at the 55th Southeast Regional American Chemical Society, Atlanta, GA, November 16–19, 2003.

18th Biennial Conference on Chemical Education, Iowa State University, Ames, Iowa, July 18-22, 2004: CWCS Symposium Presentations

12. "Center for Workshops in the Chemical Sciences: An Overview", J. Smith, E. Breyer, D. Collard, and L. Kaplan, presented at the 18th Biennial Conference on Chemical Education (BCCE), Iowa State University, Ames, IA, July 18–22, 2004.
13. "Academic-Industrial-CWCS (Center for Workshops in the Chemical Sciences) Cooperation for Workshops on Practical Aspects of Process Analytical Chemistry", Lynn Melton, Walter Henslee, Robert Ford, presented at the 18th Biennial Conference on Chemical Education (BCCE), Iowa State University, Ames, IA, July 18–22, 2004.
14. "Turning Them on to Chemistry and Art: Two Perspectives on a Successful Workshop", Patricia Hill and Richard Hark, presented at the 18th Biennial Conference on Chemical Education (BCCE), Iowa State University, Ames, IA, July 18–22, 2004.
15. "NSF-Sponsored Faculty Workshop in Combinatorial Chemistry", Daniel Ketcha, Richard T. Taylor, presented at the 18th Biennial Conference on Chemical Education (BCCE), Iowa State University, Ames, IA, July 18–22, 2004.
16. "Forensic Chemistry: An Example of a Center for Workshops in the Chemical Sciences (CWCS) Workshop, Lawrence Kaplan, presented at the 18th Biennial Conference on Chemical Education (BCCE), Iowa State University, Ames, Iowa, July 18-22, 2004.

American Chemical Society Meeting, Philadelphia, PA, September, 2004: CWCS Symposium Presentations

17. "An Overview of the *Workshops in the Chemical Sciences* program", J. Smith, E. Breyer, D. Collard, and L. Kaplan, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.
18. "Forensic chemistry: An example of a Center for Workshops in the Chemical Sciences (CWCS) workshop" Lawrence J. Kaplan, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.
19. "Solid-phase synthesis and an introduction to combinatorial chemistry", Daniel M. Ketcha, Richard T. Taylor, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.

20. "Chemistry and art workshops: Designed to energize both faculty and students. Part 1", Patricia S. Hill, Richard R. Hark, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.
21. "Chemistry and art workshops: Designed to energize both faculty and students. Part 2" Richard R. Hark, Patricia S. Hill, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.
22. "Academic-industrial-cwcs cooperation for workshops", Lynn A. Melton, Walter W. Henslee, Robert L Ford, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.
23. "Molecular genetics and protein structure and function workshop: A participant-oriented approach", Emelita Breyer, Donald K. Price, Cedric C. Muir, Rebecca L. Owen, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.
24. "Chemistry Is in the News" workshops: Faculty preparation and development Rainer E. Glaser, Kathleen M. Carson, Brian Hodgen, Zhengyu Wu, Yongqiang Sui, Susan M. Schelble, Eric Lupo, presented at the National American Chemical Society Meeting Abstracts, Philadelphia, PA, August 22-26, 2004.

Other Presentations

25. "CWCS: A National Experiment in Chemical Education (<http://chemistry.gsu.edu/cwcs>)" J. C. Smith, E. Breyer, D. Collard and L. Kaplan, presented as part of a symposium entitled "NSF Catalyzed Curriculum Development, 223rd American Chemical Society National Meeting, Orlando, FL, April 7-11, 2002 (Invited presentation).
26. "Workshops for Teaching Faculty: The Center for Workshops in the Chemical Sciences (CWCS)", D.M. Collard, J.C. Smith, E. Breyer, L.J. Kaplan, presented at the 223rd National Meeting of the American Chemical Society, Orlando, FL, April 2002.
27. "The Center for Workshops in the Chemical Sciences (CWCS) ," L.J. Kaplan, E.D. Breyer, D.M. Collard, J.C. Smith, presented at the 17th Biennial Conference on Chemical Education, Bellingham, WA, July 2002.
28. NSF-Sponsored Workshops for Teaching Faculty: The CWCS National Consortium, David Collard, Emelita Breyer, Lawrence Kaplan, J. Smith, 55th Southeast Regional American Chemical Society Meeting Abstracts, Atlanta, GA, November 16-19, 2003.
29. "A Participant-Oriented, Research-Based Workshop on Molecular Genetics and Protein Structure and Function", Emelita D. Breyer, Rebecca L. Owen, Donald K. Price, and Cedric C. Muir, presented at the Pittsburgh Conference (PITTCON), Orlando, FL, February 2004.
30. "The Chemical Workshops in the Chemical Sciences (CWCS)" J. Smith, E. Breyer, D. Collard, and L. Kaplan, NSF CCLI Conference, "Invention and Impact: Building Excellence

in Undergraduate STEM Education, Crystal City, Virginia, April 16-16, 2004 (invited poster presentation)

31. "Innovations in the Teaching of Biophysics" Jerry Smith, presented at the Biophysical Society Meeting, Long Beach, CA, February 14-16, 2005.