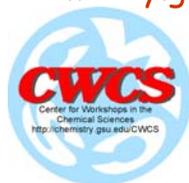


Building Communities Scholars

The Center for Workshops in the Chemical Sciences (CWCS)

David M. Collard (Georgia Tech)
Jerry Smith (Georgia State)
Lawrence J. Kaplan (Williams College)

<http://chemistry.gsu.edu/cwcs>



Division of Undergraduate Education
National Science Foundation

CWCS ADMINISTRATION



PI and Director
Jerry Smith
Department of Chemistry
Georgia State University
Atlanta, GA 30303



Co-PI and Co-director
Lawrence J. Kaplan
Department of Chemistry
Williams College
Williamstown, MA 01267



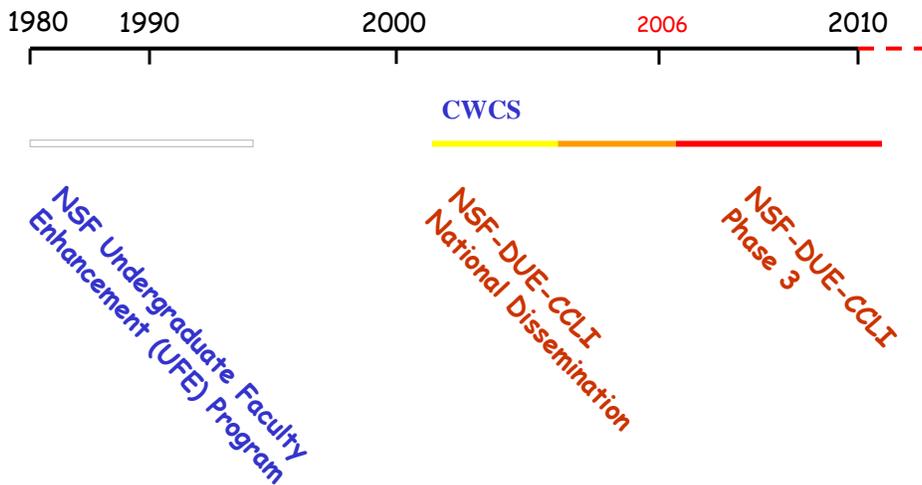
Co-PI and Co-director
David Collard
School of Chemistry & Biochemistry
Georgia Institute of Technology
Atlanta, GA 30332



Karen Brown
CWCS Coordinator
Department of Chemistry
Georgia State University

ADVISORY PANEL

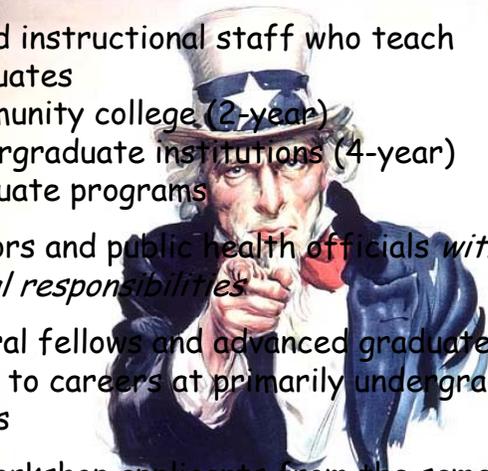
    	<p>Richard Jones Sinclair Community College</p> <p>Kerry Karukstis Harvey Mudd College</p> <p>Isai Urasa Hampton University</p> <p>Patricia Mabrouk Northeastern University</p> <p>Peter Kelley University of California, Davis</p>	   	<p>Adele Wolfson Wellesley College</p> <p>Melanie Cooper Clemson University</p> <p>Stacey Lowery-Bretz Miami University of Ohio</p> <p>Brian Coppola University of Michigan</p>
---	--	--	---



CWCS PROGRAM GOALS

- Provide opportunities for faculty development
- Topical workshops
 - Upgrade knowledge and practical skills
 - Introduce new disciplines (e.g., nanomaterials)
- Provide tried and tested pedagogies and materials
- Provide opportunities for networking
- **Development of Communities of Scholars**

WHO IS THE TARGET AUDIENCE?

- 
- Faculty and instructional staff who teach undergraduates
 - community college (2-year)
 - undergraduate institutions (4-year)
 - graduate programs
 - Conservators and public health officials *with significant educational responsibilities*
 - Postdoctoral fellows and advanced graduate students committed to careers at primarily undergraduate institutions
 - Multiple workshop applicants from the same institution encouraged

WORKSHOP FORMAT

- Five-day intensive workshop
- Sunday check-in and reception
- 8(+) hours of instruction per day, M-F
- Strong emphasis on HANDS-ON EXPERIENCES: *laboratory work, computation, field trips, etc.*
- Workshop dinner with keynote speaker
- Environment to promote interaction between participants and with workshop instructors.
- **Pre/post-workshop evaluation**



WORKSHOP SUPPORT LEVEL

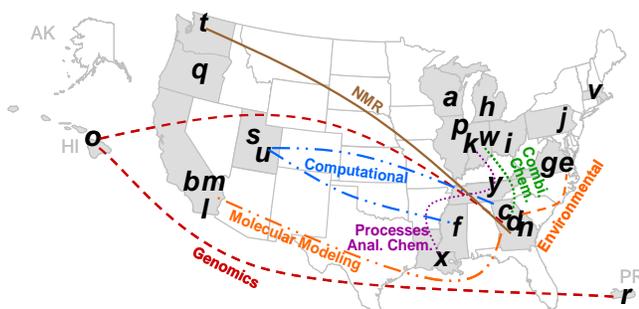
- CWCS provides grant to host institution
 - salary for workshop instructors
(+ subsistence and travel costs for non-resident instructors)
 - Materials and supplies
 - Student assistantship
 - Fringe benefits, indirect charges
- CWCS provides accommodation and food reimbursement for participants
- Travel costs are expected from participant's home institution. *Limited funds for participant travel costs in hardship cases.*
- **No tuition fees**

PARTNERSHIPS

CWCS as a vehicle for dissemination efforts associated with NSF-sponsored programs

- MID Project Workshops; Eileen Lewis-UC Berkeley
- NSF-STC in Materials and Devices for Information Technology Research (MDITR): *Functional Organic Materials*
- U. of Oregon *Green Chemistry* CCLI-MD Initiative
- ILI/CCLI *Surface Chemistry* at Kettering U.
- POGIL = Process Oriented Guided Inquiry Learning

CWCS WORKSHOP SITES



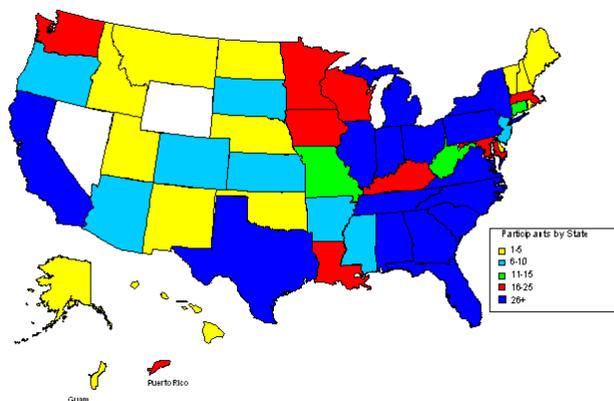
Nationwide distribution of workshops across 25 institutions in 17 states. Lines indicate portability of certain workshops and multiple offerings at different institutions.

U. Illinois - Chicago
 NJ Inst. of Technol
 Beloit College
 Millersville U.
 Jackson State U.
 UC-Irvine
 Cal State-Fullerton
 U. of Oregon
 Washington State U.
 Hampton U.
 Univ. of GA
 Wright State U.
 Miami U. of OH
 Utah State U.
 Westminster C. (Utah)
 James Madison U.
 Kettering U.
 U. Hawaii - Hilo
 U. Cent. del Caribe (PR)
 Eastman Chemicals
 Dow
 Williams College
 Georgia State U.
 GA Inst. of Technol.

WORKSHOP TOPICS (2000-06 offerings)

Forensic Science (7)
Chemistry of Art (6)
Process Analytical Chemistry (3)
Molecular Modeling (4)
Environmental Chemistry (3)
Organometallic Chemistry (2)
An Introduction to Combinatorial Chemistry (3)
Nuclear Magnetic Resonance Spectroscopy (8)
Green Chemistry (2)
Advanced Functional Organic Materials (1)
Computational and Theoretical Chemistry (4)
Modeling Biomolecules (1)
Chem. Education: Supporting Lab Learning (3)
Teaching Guided-Inquiry Organic Labs. (2)
Proteomics and Molecular Genetics (4)
Metals in Biology (1)
Laser Technology (1)
Materials Science and Nanotechnology (2)
Biomolecular Crystallography (2)
Polymer Chemistry (1)
Surface Analysis (2)

CWCS WORKSHOP PARTICIPANTS



2001-2006: 66 workshops
989 participants from 48 states (+ Guam, P.R., D.C.)

> ~~2007-KING NEWS~~ - 152 participants, from 135 institutions.



Center for Workshops in the Chemical Sciences

Workshops for College and University
Chemistry Instructors and Faculty
2008 Schedule

Tentative 2008
Summer Workshop Schedule

The **Center for Workshops in the Chemical Sciences** (a DUE CCLI-ND NSF-sponsored initiative) provides 5-day workshops for faculty and instructional staff at 2- and 4-year colleges and universities, and individuals (postdocs, graduate students) who plan to embark on a college teaching career. The workshops are designed to provide a background and modern perspective on key areas of the chemical sciences *along with methods to introduce these topics into the undergraduate curriculum*. Participation (including registration and housing) is **FREE**. For more information and application materials please visit us at:



Please check our website for updates

Environmental Chemistry – May 25-30
Hampton University, Hampton, VA

Molecular Genetics – May 25-30
University of Hawaii, Hilo, HI

Chemical Education – June 15-20
University of Illinois, Chicago, IL

Introductory Forensic Science – June 15-20
Advanced Forensic Science – June 22-27
Williams College, Williamstown, MA

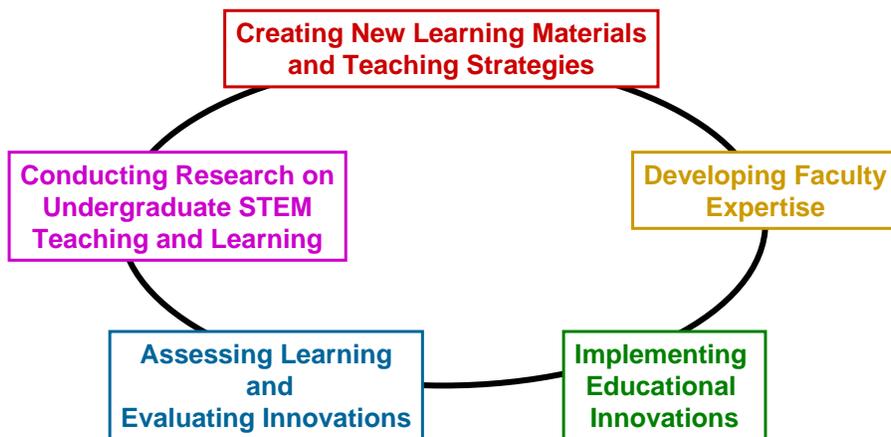
Crystallography – June 22-27
California State University-Fullerton, CA

Chemistry of Art – July 20-25
Millersville University – Millersville, PA

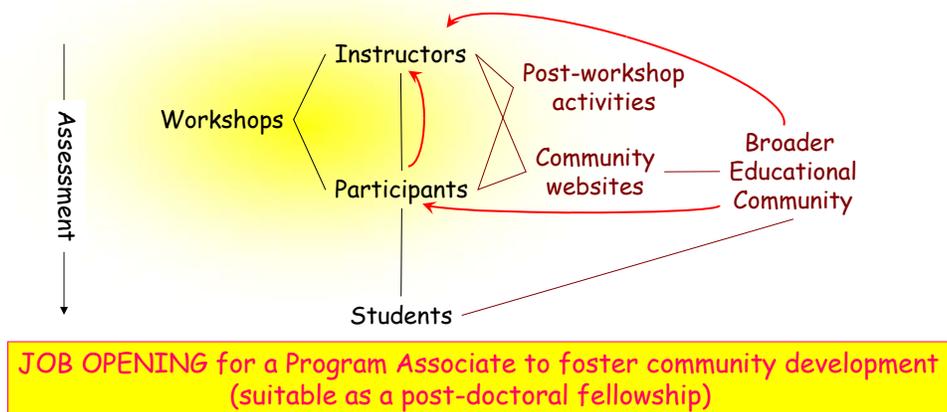
Combinatorial Chemistry – July 20-25
Miami University, Oxford, OH

www.chemistry.gsu.edu/CWCS

CYCLIC MODEL FOR KNOWLEDGE PRODUCTION AND IMPROVEMENT OF PRACTICE IN UNDERGRADUATE STEM EDUCATION NSF-CCLI Phase 3



PROMOTING DEVELOPMENT OF COMMUNITIES OF SCHOLARS



Online community
Regional topical communities
Single-college communities

Topical Content
(Pedagogy, proposal preparation, ethics, etc)

PROPOSED CWCS COMMUNITIES OF SCHOLARS

Forensic Science

Chemistry of Art

Computational Chemistry

Molecular Modeling
Computational & Theoretical Chemistry
Modeling Biomolecules

Biochemistry

Genetics
Biomolecular Crystallography
NMR

Materials Chemistry

Materials and Nanotechnology
Functional Organic Materials

Laboratory Instruction

Supporting Lab Learning
Guided-Inquiry Organic Labs

Sustainable Technologies

Green Chemistry
Environmental Chemistry
Combinatorial Chemistry
Process Analytical Chemistry

FSS Home Resources Events Curricular Material Community Members Contact

Forensic Science

- Books
- Literature
- Case Studies
- Suppliers
- Links
- Alphabetical List
- General/Introductory
- Trace
- Serology/Bloodstain DNA
- Fire/Explosive
- Drugs/Toxicology
- Reference
- Legal
- Casebooks

Sponsors

CWCS Home - CWCS



CWCS Links

- CWCS Home
- About CWCS
- Workshops

Forensic Science Scholars

FSS will soon start providing information about outstanding forensic science websites; about presentations made at national meetings; information about curricular initiatives including courses, programs, and majors in forensic science; forensic science research programs; databases of educational materials; and workshops on incorporating forensic science into the undergraduate curriculum.



News

American Chemical Society



233rd National Meeting
Chicago, March 25-29, 2007
Sessions 2 and 4, Forensic Science

[detailed info >>](#)

CWCS | Communities of Scholars | NFS
Copyright © 2007, Forensic Science Scholars

FSS Home Resources Events Curricular Material Community Members Contact

Forensic Science Scholars

- Books
- Literature
- Case Studies
- Suppliers
- Links
- JFK
- Lindberg Baby
- Napoleon
- OJ Simpson
- Oklahoma Bombing
- Tylenol
- Woodchipper

Sponsors

CWCS Home - CWCS



CWCS Links

- CWCS Home
- About CWCS
- Workshops

Resources - Resources - Books - Alphabetical List

AB C D E F G H I J K L M N O P Q R S T U V W X Y Z

Adams, Thomas F., *Crime Scene Investigation*, 2nd ed ([link to Amazon](#))
Prentice-Hall, 2003
0131397974

Baden, Michael, *Dead Reckoning: New* ([link to Amazon](#))
Simon & Schuster, 2001
0684867583

Baden, Michael, *Unnatural Death* ([link to Amazon](#))
Random House, 1989
0394569822

Bakos, Susan Crain, *Appointment for Murder* ([link to Amazon](#))
Pinnacle Books, 1989
1558172386

Balding, David J., *Weight-of-Evidence for Forensic DNA Profiles* ([link to Amazon](#))
Wiley, 2005
0470867647

Barnett, Peter D., *Ethics in Forensic Science: Professional Standards for the Practice of Criminalistics* ([link to Amazon](#))
CRC Press, 2001
0849308607

Barzun, Jacques and Taylor, W. H., *Catalogue of Crime* ([link to Amazon](#))
Harper and Row, 1989
0060157968

Bass, Bill and Jefferson, Jon, *Death's Acre: Inside the Legendary Forensic Lab/The Body Farm/Where the Dead Do Tell Tales* ([link to Amazon](#))
Putnam, 2003

FSS Home Resources Events Curricular Material Community Members Contact	
<h2 style="margin: 0;">Forensic Science Scholars</h2>	
<p>Sponsors</p>   <p>CWCS Links</p> <ul style="list-style-type: none"> CWCS Home About CWCS Workshops 	<p style="text-align: center;"> CWCS Home - Communities Of Scholars - Forensic Science Scholars - Resources - Case Studies - Kennedy Assassination </p> <hr/> <p style="text-align: center;">Case Kennedy Assassination - Introduction</p> <p style="text-align: center;"> Links Literature </p> <div style="text-align: center;">  </div>

FSS Home Resources Events Curricular Material Community Members Contact	
<h2 style="margin: 0;">Forensic Science Scholars</h2>	
<p>Sponsors</p>   <p>CWCS Links</p> <ul style="list-style-type: none"> CWCS Home About CWCS Workshops 	<p style="text-align: center;"> CWCS Home - Communities Of Scholars - Forensic Science Scholars - Resources - Case Studies - Kennedy Assassination </p> <hr/> <p style="text-align: center;">Case Kennedy Assassination - Links</p> <p style="text-align: center;"> Introduction Literature </p> <p>John McAdams maintain a very fine site with many pictures and video clips http://mcadams.posc.mu.edu/home.htm</p> <p>The Texas Monthly presents a balanced introduction to the issues surrounding the assassination. http://www.texasmonthly.com/ranch/jfk/</p> <p>An excellent, very comprehensive site about the assassination - but you have to register. http://www.imasland.com/</p> <p>This site claims to be "the most comprehensive and detailed evaluation on the Internet. We provide sound bites, text, photographs, scanned documents, video, articles and exclusives." http://pages.prodigy.net/whiskey99/</p> <p>The Zapruder film http://www.jfkmurdersolved.com/zapruder.htm</p> <p>Review the Zapruder film frame by frame http://www.assassinationresearch.com/zfilm/</p> <p>The author of this site claims the Zapruder film is a fabricated hoax http://www.assassinationscience.com/johncostella/jfk/intro/</p> <p>A neat site with many pictures and a timeline of those tragic days http://www.fiftiesweb.com/kennedy/kennedy-assassination-22.htm</p>

FSS Home Resources Events Curricular Material Community Members Contact	
Forensic Science Scholars	
Meetings Workshops 2007 Spring ACS 2007 Fall ACS 2008 BCCE	
Sponsors CWCS Home Communities Of Scholars Forensic Science Resources Case Studies Kennedy Assassination	
	
<p>Case Kennedy Assassination - Literature Introduction Links</p>	
<p>Anonymous, Reexamination of acoustic evidence in the Kennedy assassination. Committee on Ballistic Acoustics, National Research Council , Science (1982), 218(4568), 127-33.</p>	
<p>Artwohl R R, JFK 's assassination. Conspiracy, forensic science, and common sense . JAMA: the Journal of the American Medical Association (1993), 269(12), 1540-3.</p>	
<p>Breo, D. L., JFK's Death - The Plain Truth from the MDs Who Did the Autopsy , J. American Medical Association 267(20), 2794-2803 (May 27, 1992).</p>	
<p>Breo, D. L., JFK's Death, Part II - Dallas MDs Recall Their Memories , J. American Medical Association 267(20), 2804-2807 (May 27, 1992).</p>	
<p>Breo, D. L., JFK's Death, Part III - Dr. Finck Speaks Out: 'Two Bullets, From the Rear' , J. American Medical Association 268(13), 1748-1754 (October 7, 1992).</p>	
<p>Guinn, Vincent P., JFK assassination: bullet analyses, Analytical Chemistry (1979), 51(4), 484A-486A, 488A, 492A-493A.</p>	
<p>Haines D E, Spitzka and Spitzka on the brains of the assassins of presidents , Journal of the history of the neurosciences (1995), 4(3-4), 236-66.</p>	
<p>Lattimer, J. K., Additional Data on the Shooting of President Kennedy , J. American Medical Association 269(12), 1544-1547 (March 24/31, 1993)</p>	
<p>Leopold R L; Friedman J; Lindemann E; Dillon H, The Kennedy assassination , Pennsylvania medicine (1966), 69(7), 55-6.</p>	

FSS Home Resources Events Curricular Material Community Members Contact	
Forensic Science Scholars	
Sponsors CWCS Home Communities Of Scholars Forensic Science Scholars Events Meetings ACS National/Spring 2007	
	
 <p>American Chemical Society 233rd National Meeting Chicago, March 25-29, 2007 Sessions 2 and 4, Forensic Science</p>	
<p>Abstract visibility options: Show / Hide all</p>	
<p>Tuesday morning, March 27, 2007 Session 2 – Forensic Science, McCormick Place North -- Room N230B, Level 2</p>	
<p>(1591) [expand] Forensic chemistry: A CWCS workshop and the birth of a community of scholars. L. J. Kaplan Department of Chemistry, Williams College, 47 Lab Campus Drive, Williamstown, MA 01267, Fax: 413-597-4116, Lawrence.J.Kaplan@williams.edu</p>	
<p>(1592) [expand] It all started in the Goat Room: Reflections from a forensic science workshop. C. V. Gauthier Florida Southern College, 111 Lake Hollingsworth Drive, Lakeland, FL 33801, Fax: 863-680-3970, cgauthier@flsouthern.edu</p>	

FSS Home	Resources	Events	Curricular Material	Community Members	Contact
--------------------------	---------------------------	------------------------	-------------------------------------	-----------------------------------	-------------------------

Forensic Science Scholars

Syllabi	Members
Experiments	Publications
Demonstrations	Presentations
Crime Scene Scen:	Grants

[Sponsors](#) | [CWCS Home](#) | [Communities of Scholars](#) | [Forensic Science](#)

This site is developed with the support of the
The Center for Workshops in the Chemical Sciences.



FSS will soon start providing information about outstanding forensic science websites; about presentations made at national meetings; information about curricular initiatives including courses, programs, and majors in forensic science; forensic science research programs; databases of educational materials; and workshops on incorporating forensic science into the undergraduate curriculum.



[CWCS](#) | [Communities of Scholars](#) | [NFS](#)
Copyright © 2007, Forensic Science Scholars

News

American Chemical Society



233rd National Meeting
Chicago, March 25-29, 2007
Sessions 2 and 4, Forensic Science

[detailed info >>](#)

PARTICIPATION IN A COMMUNITIES OF SCHOLARS

Community Membership

Who are community members?

Community Leaders

Who are community leaders?

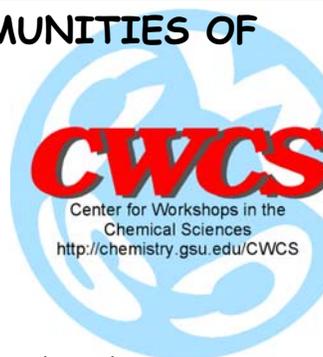
What is the role of the leaders?

Resources (illustrative examples, experiments, demos)

- Who will contribute these?
- Review process?
- Intellectual property issues?

Interaction (online, in-person)

- How do we encourage interaction and adoption of exemplary teaching materials and methods?



<http://chemistry.gsu.edu/cwcs>
Program Associate Opening

Fine
{the end}

