Colleen A. Fried
Herbert L. and Pauline Wentz Andrews Chair of Biomedical Humanities
Professor and Chair of Chemistry
Director for the Center of Literature, Medicine and Biomedical Humanities
Hiram College, Hiram, OH 44234
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Education

Iowa State University, Ames, Iowa
Doctor of Philosophy, May 1990
Major: Organic Chemistry
Dissertation Advisor: Professor Richard Larock

Carleton College, Northfield, Minnesota
Bachelor of Arts, June 1984
Major: Chemistry

Employment

Hiram College, Hiram, OH
July 2009 – present: Director for the Center for Literature, Medicine, and Biomedical Humanities. Herbert L. and Pauline Wentz Andrews Chair of Biomedical Humanities
July 2007-June 2009: Co-Director for the Center for Literature, Medicine, and Biomedical Humanities
July 2003-present: Professor
July 1997 – June 2003: Associate Professor
September 1993 - June 1997: Assistant Professor
Kent State University, Kent, OH
April 2001 – July 2002: Visiting Scientist, Chemistry
Earlham College, Richmond, IN
July 1992 – June 1993: Visiting Assistant Professor
Bucknell University, Lewisburg, PA
September 1991 – June 1992: Visiting Assistant Professor
Union Carbide Chemicals and Plastics, Inc., Tarrytown, NY
December 1989 – July 1991: Senior Chemist
Iowa State University, Ames, IA
September 1986 – December 1986: Temporary Instructor
September 1984 – December 1988: Teaching Assistant
September 1985 – December 1989: Research Assistant

Teaching Experience

- Taught a variety of chemistry courses with laboratories: Organic Chemistry I & II, Spectroscopic Identification of Organic Molecules, Special Topics in Organic Chemistry, Organic Reaction Mechanisms, Advanced Organic Chemistry, Methods in Chemistry - Organic Synthesis, Bioorganic Chemistry, Inorganic Chemistry, Bioinorganic Chemistry, General Chemistry, Introductory Chemistry, Physical Science, and Physiological Chemistry I and II

- Designed and taught a service learning course for students interested in the health care professions
- Designed and taught a service learning – public policy course for students interested in the health care professions
- Designed and taught a variety of 1-hour seminar courses for students interested in health care professions: "The Ethics of Reproduction" (with a biology faculty member), "Techniques and Issues in Medical Imaging" (with a physics faculty member), "Science in the New York Times" (with a biology faculty member), "Unfair Distribution of Healthcare Resources Worldwide" (with a biomedical humanities faculty member), "Medical Maladies and Ethical Challenges in *House*", "Healthcare Justice"
- Designed and taught interdisciplinary courses: "The Sky is Burning, the Advent of the Nuclear Age" (with a physics faculty member), "The Story of Water" (with a theatre faculty member), "What is Human?" (with a literature faculty member), "Obligations to Others" (with a literature faculty member)
- Designed and team-taught master's level interdisciplinary courses: "What is Just War?" (with a history faculty member), "What is Human?" (with an English faculty member)
- Designed and taught two first-year writing courses, "Murder, Magic, and Medicine" on chemical ethnobotany and "Solving the Crime" on forensic science.
- Developed and helped institute a new major at Hiram College, Biomedical Humanities
- Designed a service learning component for the Biomedical Humanities major
- Developed Just-in-Time Teaching assignments for Organic Chemistry
- Designed a series of active learning exercises for Organic Chemistry, Introduction to Chemistry, and Physical Science
- Developed a new laboratory sequence for the organic chemistry course based on student-team research projects
- Participated in writing curriculum development proposals including a proposal to Project TIMS (State of Ohio Department of Education through Akron University) to facilitate collaborations between the department of education and science departments and an NSF CCO-CHEM
- Served as a judge for undergraduate research presentations during the ACS Meeting of the Cleveland Section. March 1994, March 1995, March 1996, March 1997
- Served as a judge for the Ohio State Science Fair, April 20, 1996

Research Experience:

- Collaborated with two undergraduates on a medical humanities project exploring radiation poisoning in the scientific and popular literature
- Supervised forty-two undergraduate and one graduate research projects.
- Developed and extraction laboratory of spinach for use in Organic Chemistry courses.
- Developed an HPLC laboratory on the identification of over-the-counter drugs for use in General Chemistry and Organic Chemistry courses.
- Developed an efficient reduction of conjugated esters to yield allylic alcohols
- Developed a general method of transannular cyclopropanation reactions using diazo compounds
- Developed a versatile synthesis of quinoline alkaloids based on the Sugasawa reaction
- Developed a phase-transfer catalyzed carbonyl condensation reaction
- Participated in a collaborative research project on old-field succession

- Developed and elucidated a general method of palladium-catalyzed carboannulation of aryl iodides with dienes, including preparation of a wide variety of dienes and aryl iodides
- Investigated a unique palladium-mediated rearrangement in the reaction of norbornadiene-palladium dichloride and propargylic mercurials
- Synthesized and tested a variety of organo-modified polysiloxanes designed to impart softness, hydrophilicity, hydrophobicity, and/or oleophobicity to textiles
- Trained and supervised a laboratory technician in synthesis, fabric treatment and testing
- Participated in multifunctional teams directed at improving existing products
- Worked with production to insure smooth scale-up of potential products
- Trained younger students in various laboratory techniques including flash column chromatography and the handling of air-sensitive and toxic compounds
- Maintained and trained students and faculty on the GC-MS, FT-IR, GC, HPLC, Diode-Array UV-Vis, and Anasazi NMR-upgrade
- Participated in writing a variety of grant proposals: OHC Summer Teachers Institute Grant, APAP Creative Campus Innovations Grant, NEH Challenge Grant, NSF AIRE, NSF C-RUI, Camille and Henry Dreyfus Foundation Start-up Grant, and instrument proposals to the Dr. Scholl Foundation and Spectroscopy Society of Pittsburgh

Grants, Awards, and Fellowships Received

2011 - Vencl-Carr Award for Outstanding Faculty
2011 - Ohio Humanities Council, Summer Teachers Institute Grant: (OHC-11-028): What is Human?: A Humanities Institute for High School Teachers.
2009 - APAP Creative Campus Innovations Grant: The Art of Medicine: Exploring Healthcare Through Dance: planning grant.
2009 – Herbert L. and Pauline Wentz Professor of Biomedical Humanities
2007 – Paul Martin Award for exemplary service and teaching at Hiram College
2005 - Paul Martin Award for exemplary service and teaching at Hiram College
2002 – NEH Challenge Grant: Building Long-Term Resources for the Biomedical Humanities at Hiram College
2000 - Paul A. Frohring Faculty Research Award
1999 – Paul Martin Award for exemplary service and teaching at Hiram College
1997 – Paul Martin Award for exemplary service and teaching at Hiram College
1996 – Gerstacker-Gund Fellowship: Distributions of Plant Phenolics in an Old Field.
1995 – Gerstacker-Gund Fellowship: Revitalizing the Organic Laboratory Course.
1994 – NSF ILI-IG grant: DUE-9452350: Integration of HPLC and GC-MS into Restructured Undergraduate Organic Chemistry Laboratory.
1994 – Paul Martin Award for exemplary service and teaching at Hiram College
1994 – Gerstacker-Gund Fellowship: Organic Chemistry Curricular Innovation
1986 – Outstanding Teaching Assistant at Iowa State University

Professional Associations

American Society for Bioethics and Humanities
Association for Practical and Professional Ethics
Hastings Center, Associate Member
Project Kaleidoscope, Faculty for the 21st Century
Council on Undergraduate Research, Institutional Liaison Fall 1994-Spring 1997
American Chemical Society – Organic Division and Division of Chemical Education

Ohio Academy of Science
Iota Sigma Pi, chapter President 1988
American Association for Higher Education
American Association of University Professors, Hiram College chapter President 1999-2001

Service and Leadership Activities

Director, Center for Literature, Medicine, and Biomedical Humanities, July 2009-present
Co-Director, Center for Literature, Medicine, and Biomedical Humanities, Summer 2007-June 2009
Chair, Chemistry Department, Fall 2006-present
Chair, Biomedical Humanities Department, Fall 2005-present
Biomedical Humanities Advisory Council, Spring 2005-present.
Food Studies Advisory Board, Spring 2011-present
Search Committee, Chemistry Research Teaching Associate, Spring 2011
Search Committee, Nursing Faculty Member, Spring 2011
Strategic Planning Team, Summer 2009-Fall 2010
Search Committee, Nursing Faculty Member, Spring 2010
Health Sciences Board, Fall 1994-summer 2009, **Chair** 1995-1997 and 2002-summer 2009
Ethics Committee, Fall 2006-Summer 2009
Search Committee, Nursing Faculty Member, Spring 2009
Search Committee, Biomedical Humanities Faculty Member, Fall 2008
Chair, Search Committee, Chemistry Faculty Member, Fall 2008
Search Committee, Bookstore Manager, Summer 2008
Search Committee, Nursing Faculty Member, Spring 2008
Chair, Search Committee, Biomedical Humanities Faculty Member, Fall 2007
Symposium Organizer, Stages: Cancer and the Arts, Fall 2007 (Eric Coble and Laurie Frey – *Unbeatable, A Musical Journey*, Sept. 27; play *Sarah's Daughter*, Sept. 28 and 29; Jeff Nisker playwright *Sarah's Daughter*, Oct. 4; play *Wit*, Nov. 1-3; Tom Batiuk – *Lisa's Story: The Other Shoe*, Nov.29).
Appointment, Tenure, and Promotion Committee, Fall 1997-Spring 1999 and Fall 2003-Spring 2007
Chair, Search Committee, Chemistry Faculty Member, Fall 2006-Spring 2007
Co-Chair, Search Committee, Biochemistry Faculty Member, Spring 2006-Spring 2007
Chair, Search Committee, Director for the Center of Literature and Medicine, Spring 2006
Academic Program Committee, Fall 1994-Spring 1997 and Fall 2003-Spring 2006
Hiram Village Zoning and Planning Board, December 2001-January 2006; **Chair** January 2004-January 2006; **Recording Secretary** June 2002-January 2004
Co-Coordinator and Designer of Biomedical Humanities Major, Fall 1997-Spring 2005
Village Alternate Representative, Regional Planning Commission, June 2002-January 2005
Inauguration Committee, **Honorary Faculty Chair**, Spring and Summer 2004
Search Committee, Women's Head Basketball Coach, Spring 2004
Coordinator of the Science Learning Center, Fall 1997-Spring 2003
Writing Committee, Academic Year 2002-2003
Search Committee, Assistant Director of Residence Life/Director of Community Service, Winter 2003
Selection Committee, Ohio Board of Regents Graduate/Professional Fellowship Program, Winter 2003
Search Committee, Biochemistry Sabbatical Replacement, Winter 2003
Search Committee, Vice President of Development, Summer 2002-Fall 2002

Search Committee, Chemistry-Biology Secretary, Summer 2002
Workshop Planning Committee and Leader. Just-in-Time Teaching, a PKAL Workshop. Snowbird Ski and Summer Resort, Snowbird, UT, July 15-18, 2001.
Search Committee, Chemistry Sabbatical Replacement, Spring 2001
Search Committee, Physics Faculty, Spring 2001
Classroom Observation Committee, 2000-2001 academic year
Classroom observer and peer mentor for new faculty, 2000-2001 academic year
Co-organizer of the Deemer Symposium on Reproductive Ethics, Spring 2000
Pre-professional Programs Committee, Spring 2000
Search Committee, Physics Faculty, Spring 2000
Parking Committee, 1999-2000 academic year
President, AAUP Hiram College Chapter, Fall 1999-Spring 2001
Advisory Committee for Facilities/Capital Needs, Spring 1999
Northwoods Program Committee, Fall 1998-Spring 2000
Acting **Chair** of Chemistry, Spring 1998
Academic Review Board, Fall 1997-Spring 1998
Leader, Hiram College team at: The Research-Rich Environment, a PKAL Workshop. July 18-20, 1997. Bryn Mawr, PA
Chair, Search Committee, Academic Dean and Vice President, Spring 1997
Search Committee, Chemistry Laboratory Assistant, Spring 1997
Faculty Trustee Committee, Fall 1996-Spring 1997
Faculty Advisor for Medicus, Fall 1995-present
Organizer and **facilitator,** Science Faculty Retreat, September 14-15, 1995
Environmental Studies Board, Fall 1994-Spring 1997
Search Committee, Head Women's Soccer and Softball Coach, Fall 1994
Search Committee, Head Men's Basketball Coach, Fall 1994
Search Committee, Molecular Biology Faculty, Spring 1994
Calendar Reform Subcommittee, Spring 1994
Biology-Chemistry Bridge Committee, Fall 1993-Spring 1994
Faculty Advisor for LGBA, Fall 1993-Spring 1997
New Science Facility Planning Group, Fall 1993-Spring 1996
Chemical Curriculum Committee, Bucknell University, Fall 1991-Spring 1992
Union Carbide Chemicals & Plastics EQ Steering Committee, 1990-1991
Union Carbide Chemicals & Plastics CEC Board Member, **President** 1991

Research Collaborations with Students

Tamara Guseman (Sp'11-present): Radiation Effects in Pop Culture: the Fantastic Four and Beyond.
Cara Citraro (Su'06-Dec. '08): Synthesis of arylacetic acids.
Kristin Tomblin (Su'06-Fa'06): Synthesis of arylacetic acids.
Kevin Barnett (Su'06): Synthesis of arylacetic acids.
Adam McQuaid (Su'06): Synthesis of arylacetic acids.
Katie Stimler (Su'06): Synthesis of arylacetic acids.
Natalie Smith (F'05): Synthesis of arylaldehydes.
Rudy Wojtecki (F'05-present): Synthesis and electrochemistry of porphyrins
Kate Heemstra (Sp'05): Microwave-enhanced synthesis
Jennifer Leising (F'03-Sp'05): Synthesis of macrocyclic precursors for Taxol
Mark Nasca (junior from Gilmore Academy, Su '04): Synthesis of allyl alcohols.
Brian Watkins (S'04): Oxidation of Haloalcohols

Alicia Lu (S'04): Extraction and characterization of chlorophylls and related compounds from spinach
Kate Heemstra (S'03): Using HPLC to identify over-the-counter drugs
Greg Lillvis (F'2): Reduction of conjugated esters to allylic alcohols
Yvette Zuzeek (F''02): Reduction of conjugated esters to allylic alcohols
Melissa Geraci (Su'01): Model Studies of Transannular Cyclopropanations
Lauren Bell (Su'01): Model Studies of Transannular Cyclopropanations
Joel McManus (S'01): Applications of the Sugasawa Reaction to the Synthesis of Quinoline Alkaloids.
Lauren Bell (S'01): The Sugasawa Reaction of Nitriles with non-Aniline Aromatics
Joel McManus (S'01): The Sugasawa Reaction of Nitriles with non-Aniline Aromatics
Todd Young (F '00-S'01): The Sugasawa Reaction of Nitriles with non-Aniline Aromatics
Ryan Lemley (F '00): Model Studies on the Synthesis of Quinoline Alkaloids
Christopher Dombos (F '00): A Study of Limiting Reagents using Vinegar and Baking Soda, a lab for Introductory Chemistry
Lauren Bell (F '00): Analysis of the Variation in Snicker's Bars, a lab for Introductory Chemistry
Heather Miller (F'99-S'00): Multi-component Coupling Reactions Using Palladium-Catalysts
Joseph Lisko (Su'98, F'99-S'00): Synthesis of Quinoline Alkaloids via Aromatic Acylations
Elizabeth Alappat (F'99): Phase Transfer Catalysis in Carbonyl Condensation Reactions
Karl Oliver A. Yu (F'97-S'98): A Study of the Price-Butler Method of Analyzing Tannins
Timothy Korytko (F'97): A Mild Base for the Catalysis of the Aldol Reaction
Lucas Clarke (F'96): Variations on Aldol Condensation Reactions
Jack Hunter (S'96-F'96): Variations on Aldol Condensation Reactions
Denise McKinney (Su'96): The Effects of Nutrient Additions on Phenol Levels in Plants of an Old Field
Tami McClelland (Su'96): The Effects of Nutrient Additions on Phenol Levels in Plants of an Old Field
Jennifer Colosimo (S'96): A Microscale Synthesis of Methyl Salicylate
Shannon Lemmo (F'95): Synthesis of Aspirin from an Extract of Bark of River Birch
Courtney Vance (S'94): Saturated and Unsaturated Fatty Acid Residues in Cellular Membranes
Jason Fried (F'93-S'94): A Study of the Friedel-Crafts Reaction of Ortho-Esters
Liza Doepken (S'93): Synthesis of β-Stannylated Ketones
Lars Bruns (S'92): Synthesis of β-Iodo and β-Stannylated Ketones
Todd Vincent (S'92): Synthesis of β-Iodo and β-Stannylated Ketones
Tina Golini (S'92): Dimethyl Acetals in Electrophilic Annulations
Dan Hutta (S'92): Dimethyl Acetals in Electrophilic Annulations
Shane Kasper (S'92): Reactions of Norbornadiene-palladium Dichloride
Luke McHale (S'92): Reactions of Norbornadiene-palladium Dichloride

Selected Grants and Grant Proposals:

"What is Human?: A Humanities Institute for High School Teachers" for $16,000, October 15, 2010 to Ohio Humanities Council, Summer Teachers Institute Grant. (OHC-11-028)

"The Art of Medicine: Exploring Healthcare Through Dance" for $173, 956, March 1, 2010 to Creative Campus Innovations Grant Program through the Association of Performing Arts Presenters. Preliminary proposal submitted in July 2009, $7000 planning grant received December 2009.

"Challenge Grant for Center for Literature and Medicine" for $800,000 ($1,000,000 total), April 2002 to the National Endowment for Humanities.

Selected Publications:

Colleen Fried. "Using Just-in-Time Teaching in the Organic Classroom." An invited paper to the ConfChem "Trends and New Ideas in Chemical Education." [http://www.ched-ccce.org/confchem/2005/a/index.html] January-February 2005. Paper was discussed Feb. 1-4, 2005.

Colleen Fried, Sandra Madar, Carol Donley, "Biomedical Humanities – Merging Humanities and Science in an Undergraduate Premed Curriculum at Hiram College." *Academic Medicine*, **2003**, 78(10), 993.

Karl O. A. Yu, Colleen A. Fried, Prudence J. Hall. "Tannic Acid Effects on *Raphanus raphanistrum* Rood Acid Phosphatase," *Ohio Journal of Science*, **2000**, *100(5)*, 132.

A. M. Czech, C. A. Fried, A. -L. Kuo, A. J. Sabia, "Method for Imparting Softness with Reduced Yellowing to a Textile Using Low Amine Content, High Molecular Weight Aminopolysiloxane." U. S. Patent #5593611, December 1996

R. C. Larock, N. G. Berrios-Pena, C. A. Fried, E. K. Yum, C. Tu, W. Leong, "Palladium-catalyzed Annulation of 1,4-Dienes Using Functionally-substituted Aryl Halides," *J. Org. Chem.*, **1993**, *58*, 4509.

A. M. Czech, C. A. Fried, A. -L. Kuo, A. J. Sabia, "Method for Imparting Softness with Reduced Yellowing to a Textile Using Low Amine Content, High Molecular Weight Aminopolysiloxane." Patent Application, Docket #D-16925, Filed June 25, 1992.

R. C. Larock, N. G. Berrios-Pena, C. A. Fried, "Regioselective, Palladium-catalyzed Hetero- and Carboannulation of 1,2-Dienes Using Functionally-Substituted Aryl Halides," *J. Org. Chem.*, **1991**, *56*, 2615.

R. C. Larock, C. A. Fried, "Palladium-catalyzed Carboannulation of 1,3-Dienes by Aryl Halides," *J. Am. Chem. Soc.*, **1990**, *112*, 5882.

Bold indicates an undergraduate author

Selected Presentations:

Colleen Fried. "Nuclear Warfare: an introduction." Hiram College, MAIS 5236 Just War, March 12, 2011.

Colleen Fried. "Andrews Chair Address". Hiram College, August 28, 2009.

Rudy J. Wojtecki, Colleen Fried. "Towards a Strapped Porphyrin Logic Gate." Ohio Academy of Science, April 22, 2006, Dayton, OH published abstract – *The Ohio Journal of Science,* Vol. 106, No. 1.

Colleen Fried. "The Center for Literature and Medicine." Hiram College Alumni Weekend, June 16, 2007.

Jennifer A. Leising, Colleen Fried. "Synthesis of β-Ketolactone Medium-Sized Rings for Transannular Reaction Studies." Ohio Academy of Science, April 2, 2005, Bowling Green, OH published abstract - *The Ohio Journal of Science*, Vol. 105, No. 1.

Sandy Madar and Colleen Fried. "Me and Little Me: Cloning and Beyond." A day-long course for Alumni Weekend, Hiram College, June 13, 2003.

Colleen Fried. "Just-in-Time Teaching: Technology in Service of Learning." Northeast Ohio Council on Higher Education, Instructional Technology Committee, Hiram College, May 23, 2003.

Colleen Fried. "JiTT: Using Technology to Increase Student-Faculty Interaction and Improve Student Learning." Hiram College Faculty Discussion, March 27, 2003.

Colleen Fried. "Strains, Chains, and Carbocycles: Adventures with Taxol" Hiram College Library Forum, September 18, 2002.

Carol Donley, Colleen Fried, Martin Kohn, Sandy Madar. "The Science and the Literature of Cloning" Hiram College Board of Visitors, May 31, 2002.

Colleen Fried. "JiTT Experiences in Chemistry." Just-in-Time Teaching, a PKAL Workshop. Snowbird Ski and Summer Resort, Snowbird, UT, July 15-18, 2001.

Colleen Fried. "Electrophilic Aromatic Substitutions and their Applications Towards the Synthesis of Quinoline Alkaloids", Youngstown State University, an invited lecture, February 16, 2001.

Colleen Fried, Sandra Madar. "So You Want to be a Doctor? - Exploring a Science Major" a presentation to A.C.E.S. (a minority student mentoring group), Hiram College. September 27, 2000.

Joseph G. Lisko, Colleen A. Fried. "Acylation of Aromatic Compounds Using Nitriles and Esters." Ohio Academy of Science, April 1, 2000, Ada, OH. published abstract - *The Ohio Journal of Science*, Vol. 100, No. 1, p. A-16

Sandra Madar, Colleen Fried. "Biomedical Humanities - a new Interdisciplinary Major at Hiram College." PKAL 10th Anniversary Celebration, October 22, 1999,College Park, MD.

K. O. A. Yu, C. A. Fried and P. J. Hall. "Tannic Acid and Acid Phosphatase Interactions in *Raphanus raphanistrum* Roots." 43rd Annual May Conference of The Cleveland Section of the Society for Applied Spectroscopy, May 19, 1999, Cleveland, OH.

Timothy Korytko, Colleen Fried. "Phase Transfer Catalysis of Mild Condition Aldol Condensations Allow for Reasonable Yield and the Stabilization of Other Enolate Reactions." Sigma Xi Conference, May 2, 1998, Philadelphia, PA.

Karl Oliver A. Yu, Dr. Colleen A. Fried, "A Study on the Price Butler Method of Analyzing Tannins." a poster, **1998** Council on Undergraduate Research Poster Session on Capital Hill, April 4, 1998, Washington D. C.

Colleen Fried, Discussion Leader. "Field Experiences in Undergraduate Biology Courses: Questions and (Some) Answers." Ohio College Biology Teachers Conference, September 20, 1997, Hiram College.

Colleen Fried, Bradley Gubser, Anne Kubelik, Jay Thomas. "Building a Research Community at a Small College." Project Kaleidoscope Workshop, *The Research-Rich Environment,* July 18, 1997, Bryn Mawr, PA.

Jack A. Hunter, Lucas L. Clarke*,* Dr. Colleen A. Fried. "Variations on Aldol Condensation Reactions." Ohio Academy of Science, April 4, 1997, Bowling Green, OH. published abstract - *The Ohio Journal of Science*, Vol. 97, No. 2, p. A-18.

Tami R. McClelland, Denise E. McKinney*,* Dr. Colleen A. Fried. "The Effects of Nutrient Additions on Phenol Levels in Plants of a Successionary Field." Ohio Academy of Science, April 4, 1997, Bowling Green, OH. published abstract - *The Ohio Journal of Science*, Vol. 97, No. 2, p. A-13.

C. A. Fried. "Chemists, Biologists, and the Old Field that Binds." Hiram College Library Forum, February 19, 1997.

Colleen Fried, Mary Truax, Marty Huehner. "Water Analysis" - a workshop. The 1996 Hiram College Teacher Enrichment Program, June 17-21, 1996.

Colleen Fried, Richard Hyde. "Shared Resources of the ECC." East Central Colleges New Faculty Workshop. October 13-14, 1995. Salt Fork State Park, OH.

Colleen Fried, Laura Van Wormer. Organizers of the Hiram College Science Faculty Retreat. September 1995

Colleen Fried. "Biological and Environmental Chemistry" - a workshop. The 1995 Hiram College Teacher Enrichment Program, June 25-29, 1995.

Colleen Fried. "The Development of the Atomic Bomb." Hiram College Alumni Weekend, June 15, 1995.

Colleen Fried. "Cultural Diversity in the Classroom." East Central Colleges New Faculty Workshop. October 14-15, 1994. Attwood Lake, OH.

Colleen Fried. "Kitchen Chemistry" - a workshop for 7th and 8th grade girls. Project X-Cell, October 28-30, 1993, Hiram College.

C. A. Fried, R. C. Larock. "Synthesis of Polycycles via Palladium-catalyzed Annulations." ACS Midwest Regional Meeting, November 1988, Iowa City, IA.

C. A. Fried, R. C. Larock. "Palladium (0)-catalyzed Carboannulations." ACS Iowa Sectional Meeting, April 1988, Grinnell, IA.

Bold indicates an undergraduate presenter

Workshops Attended and Additional Classwork:

Speaking about Course Redesign, March 2, 2012, a day-long, on-line webinar. I participated in lectures on "The Role of Lecture in a Redesigned Course," "Working with Pearson as a Partner," "Changing the Culture: Overcoming Obstacles with Students," "Getting Started with Course Redesign," "Changing the Culture: Overcoming Obstacles with Faculty," and "Tracking Your Student Data and Refining Your Course Redesign"

Case-Based Studies in Chemical Education, 2011 Spring ConfChem, an on-line chemical conference. I participated in on-line discussions on 8 different papers on various aspects of using case studies in chemistry courses.

Health and Community, the 12th Annual Meeting of ASBH in San Diego, CA, October 21-24, 2010. I attended a series of talks and workshops on medical humanities, exploring ways to expand our Center and its major. In particular I focused on those sessions dealing with integrating theatre and other arts into the medical humanities curriculum. I also participated in the Program and Course Directors of Humanities and Bioethics in Health Profession Education round table discussion as well as the Literature and Medicine round table discussion

Translating Bioethics and Humanities, the 11th Annual Meeting of ASBH in Washington, D.C., October 15-18, 2009. I attended a series of talks and workshops on medical humanities, exploring ways to expand our Center and its major. I also participated in the Program and Course Directors of Humanities and Bioethics in Health Profession Education round table discussion

Intensive Bioethics Course – "Bioethics Beyond the Sound Bite" at Georgetown University, Kennedy Institute of Ethics, May 31, 2009 – June 5, 2009. This was a week long course covering a variety of topics in bioethics.

Future Tense, the 10th Annual Meeting of ASBH in Cleveland, OH, October 23-26, 2008. I attended a series of talks on medical humanities, exploring ways to expand our Center and its major.

Return to the House of God, October 23-24, 2008. A symposium building from Samuel Shem's 1978 novel, *The House of God*, exploring issues of medical resident education from 1978-2008.

Introduction to Cascading Style Sheets. a six-week on-line course through the International Webmasters Association (http://www.iwanet.org/), March – April 2004.

Introduction to HTML. a six-week on-line course through the International Webmasters Association (http://www.iwanet.org/), January – February 2004.

Using Technology in the Teaching of Organic Chemistry, on-line at PresentOnline.com, October 16, 2002.

Just-in-Time Teaching, a PKAL Workshop. Snowbird Ski and Summer Resort, Snowbird, UT, July 15-18, 2001.

Project TIMS Chautauqua, January 11-12, 2001. Teaching Inquiry in Math and Science, a workshop put on by the University of Akron. This workshop was designed to assist teams of science faculty and education faculty to find ways to collaborate and improve science education for all students.

Getting Started with On-Line Courses using FrontPage 2000, an on-line course through www.netlearning.org. October 1-December 5, 2000. This course covered basic HTML programming, Basic FrontPage Web Design, and Advanced FrontPage Web Design and Management. My activities were focused on the development of a course web-site for the Organic Chemistry Laboratory.

Just-in-Time Teaching: Blending Active Learning with Web Technology, a PKAL Workshop. Keystone Resort and Conference Center, Keystone, CO, July 19-22, 2000.

PKAL 10th Anniversary National Meeting and F-21 National Assembly - University of Maryland College Park and Washington D.C., October 21-24, 1999. I attended workshops on "Making Change and Institutional Priority", "Inquiry-based General Chemistry at Franklin and Marshall College", and "The Nature of Learning." As part of the Faculty for the Twenty-first Century, I attended a Congressional Breakfast to lobby the congress about the importance of science funding, particularly that aimed to improve undergraduate education and research experiences.

Biochemistry - Biology or Chemistry, a PKAL Workshop. Macalester College, Saint Paul, MN, July 16-18, 1999.

The Research-Rich Environment, a PKAL Workshop. July 18-20, 1997. Bryn Mawr College, Bryn Mawr, PA. Leader for the college team.

Inquiry-Based Chemistry: What is it? How Does it Work? June 4-6, 1995. Washington, D. C. Attended a variety of discussion sessions and workshops in inquiry-based chemistry.

An Afternoon Dedicated to Women in Science. April 7, 1995. Northeastern Ohio Universities College of Medicine. Attended sessions on Equity and Pay Issues, Federal Funding, and Scientific Publication.

Foote Ethics Workshop. Hiram College, Hiram, OH. December 7-14, 1994. The workshop was designed to help faculty integrate ethics into new or current courses.

13th Biennial Conference on Chemical Education: Learning Chemistry by Doing Chemistry. July 31-August 4, 1994. Bucknell University, Lewisburg, PA. Attended the following

workshops: Chemistry in Context, Increasing the Use of Writing in Chemistry Courses, The ACS Approved Curriculum, New Approaches to Teaching Organic Chemistry.

Fifth National Conference of the Council on Undergraduate Research: Creating and Maintaining a Healthy Undergraduate Research Environment. June 22-June 25, 1994. Bates College, Lewiston, ME. Attended the following workshops: Funding Opportunities with Federal Agencies and Private Foundations, Establishing Undergraduate Research at Institutions with a Limited Track Record, REU Site Programs: Writing a Competitive Proposal and Sustaining an REU Site Program at a Predominantly Undergraduate Institution, Mentoring and Peer Assistance Networks Of CUR, Developing and Enhancing Undergraduate Research Through Collaboration.

University of Illinois at Chicago Chemistry Symposium: External Evaluation of Science Curricula. April 15, 1994. Attended the following discussions: Student Success and Persistence in College - Some Facts and Some Myths, Studies of Retention Strategies for African-American Students in Chemistry, Talking about Leaving: Factors Contributing to High Attrition Rates Among Science, Mathematics, and Engineering Undergraduate Majors.

Form Isolation to Solutions: Addressing the Needs of Lesbian/Gay/Bisexual Youth. February 25, 1994. Participated in discussions on the special needs of lesbian/gay/bisexual/transgender youth.

ECC New Faculty Development Workshop. October 22-23, 1993. Salt Fork State Park, OH. Attended sessions on: Personality Styles - Teaching and Learning; Balancing Job Demands, Dealing with Stress, Maintaining Sanity; Gender Issues in the Classroom; Teaching Outside of Your Discipline.

Writing Across the Curriculum. August 10-15, 1991. Bucknell University. Participated in this week-long short course designed to introduce faculty to the potential uses of writing and active-learning exercises.