



## "Investigating Interdisciplinary Interactions"

June 11-19, 2005

Beloit College, Beloit, Wisconsin

<http://www.bioquest.org/summer2005>

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Participant List

#### **2. Introduction**

Laws, Priscilla W. 1999. New Approaches to Science and Mathematics Teaching at Liberal Arts Colleges. Chapter from *Daedalus: Journal of the American Academy of Arts and Sciences*. Winter 1999. Stephen R. Graubard (Ed.)

Gross, Louis J. 2004. Interdisciplinarity and the Undergraduate Biology Curriculum: Finding a Balance. *Cell Biology Education*. Vol. 3. P. 85092.

Jungck, John R. 1972. The Three I's: Interdisciplinary, Investigative, and Independent Study. Chapter from *How Ought Science Be Taught?* Paul A. Taylor & Ronald K. Gibbs (Eds.). MSS Information Corporation. P. 210-211.

Yarnell, Amanda. 2002. Focusing on Reform. *Chemical & Engineering News*. Vol. 80:43. 5 pp.

Handelsman, Jo, et al. 2004. Scientific Teaching. *Science*. Vol. 304. p. 521-522.

Handelsman, Jo, et al. *Science* Supporting Online Material. 16 pp.

Stokstad, Erik. 2001. Getting More Out of the Classroom: Reintroducing the Intro Course. *Science*. Vol. 293. p. 1607-1610.

Cech, Thomas R. & G. M. Rubin. 2004. Nurturing Interdisciplinary Research. *Nature Structural & Molecular Biology*. Vol. 11:12. p. 1166-1168.

Ares, Jr., Manuel. 2004. Interdisciplinary Research and the Undergraduate Biology Student. *Nature Structural & Molecular Biology*. Vol. 11:12. p. 1170-1172.

### 3. Workshop Physics

Laws, Priscilla. 1997. The Scientific Way of Knowing: What Does it Mean When Scientists Say They Know Something? Lecture from Science Education and the Spirit of Invention: PKAL at Chautauqua.

Laws, Priscilla. 1996. Choosing Computer Applications for Physics Instruction. 2 page paper.

Laws, Priscilla. 2004. Technology in Inquiry-Based Teaching: A Physics Oriented Perspective. Adapted from a 1999 AAC&U Peer Review Article: Technology in Inquiry-Based Teaching—Promise or Pitfall? 4 page paper.

### 4. ChemLinks

NSF Initiative – Systemic Changes in the Undergraduate Chemistry Curriculum. 4 pages.

ChemConnections Modules Descriptions. 5 pages.

Synopsis of ChemConnections Evaluation Studies. 6 pages.

### 5. Workshop Mathematics

Baxter Hastings, Nancy. 2005. The Workshop Mathematics Project. PowerPoint slides. 6 pages.

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Laws, Priscilla and N. Baxter Hastings. 2002. Reforming Science and Mathematics Teaching: FIPSE as a Catalyst for Change. *Change*. P. 2-14.

### 6. BioQUEST

Stanley, E. and M. Waterman. Using Investigative Cases in Geoscience. <http://serc.carleton.edu/introgeo/icbl/index.html> Part of the “Starting Point: Teaching Introductory Level Geoscience” website at the Science Education Resource Center at Carleton College.

Margaret Waterman and Ethel Stanley. Doing Science Collaboratively with Investigative Case Based Learning. *Strategies for Success* Newsletter, Issue 41, Spring 2004. Longer article with resources also published on <http://www.aw-bc.com/events/strategies/newsletters/index.html> March 2004.

Waterman, M.A. Investigative Case Study Approach for Biology Learning. *Bioscene - Journal of College Biology Teaching* 24(1): 3-10, April 1998.

"Crossing the Chasm" of Curricular Reform: BioQUEST Curriculum Consortium Invites CAL-laboration *CAL-laborate* Volume 4 June 2000

Bioinformatics Education Dissemination: Reaching Out, Connecting and Knitting together (BEDROCK). *BioQUEST Notes*. Vol. 12:1, Fall 2002. P. 6-7.

Greenler, Robin M. 2004. Problem Spaces and BioQUEST: An Introduction. *BioQUEST Notes*. Vol. 13:1. P. 1-7.

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Jungck, John R. 1997. Ten Equations that Changed Biology: Mathematics in Problem-Solving Biology Curricula. *Bioscene*. Vol. 23:1. P. 11-36.

Poster Evaluation Sheet

## 7. Speakers

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Lopez, R. E., & K. Hamed. In Press. Student Interpretations of 2-D and 3-D Renderings of the Substorm Current Wedge. *Journal of Atmospheric and Solar-Terrestrial Physics*.