# ACUBE 42nd Annual Meeting

Rockhurst College  
Kansas City, Missouri  
October 15-17, 1998

## Preliminary Program

### Are We Preparing Global Citizens:  
Aware, Active, and Accountable?

**Thursday, October 15th**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6:00 - 8:00 PM</td>
<td>Registration and Reception</td>
<td>Richardson Entrance</td>
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<tr>
<td>8:00 PM</td>
<td><strong>Opening Session</strong>  &lt;br&gt; Welcome for ACUBE  &lt;br&gt; ACUBE President: <strong>Karen Klyczek, UW-River Falls</strong>  &lt;br&gt; Welcome to Rockhurst College: <strong>Corey Simmonds, Acting Dean, College of Arts and Sciences</strong>  &lt;br&gt; Program Chair: <strong>Terry Derting, Murray State University</strong>  &lt;br&gt; Local Arrangements Chair: <strong>Kevin Williams and Dick Wilson, Rockhurst College</strong></td>
<td>Richardson 115</td>
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<td>9:30</td>
<td><strong>OPENING ADDRESS</strong> (Public Welcome to Attend)  &lt;br&gt; <em>Long-Term Ecological Research in Tallgrass Prairie: The Role of Basic Research in the Conservation of Grassland Ecosystems,</em> Dr. Alan K. Knapp, <em>Kansas State University</em> and KONZA</td>
<td>Richardson 302</td>
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**Friday, October 16th**

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<thead>
<tr>
<th>Time</th>
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<tr>
<td>7:00 AM - 5:00 PM</td>
<td>Registration table will be open all day  &lt;br&gt; Please check your membership; inquire about audiovisual needs; general information.</td>
<td>Richardson Entrance</td>
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<td>7:00 - 8:00 AM</td>
<td>Buffet Breakfast (by Interest Group)</td>
<td>Massman Gallery (Massman Hall)</td>
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<td>9:00 - 11:30 AM</td>
<td>Sustaining Member Exhibitors</td>
<td>Richardson 206</td>
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<tr>
<td>9:45 - 10:00 AM</td>
<td><strong>Morning Break (Refreshments)</strong></td>
<td>Richardson 206</td>
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11:30 - 1:15 PM  Luncheon and First Business Meeting  Rockroom  (Massman Hall)

Are We Preparing Global Citizens?
Panel:
Dr. Dean Jerringan, Ottawa University, Associate Professor of Science Education (formerly 30-year teacher at Shawnee Mission South High School)
Mr. Chris Gentile, Director of Material Engineering and Technical Services; Allied Signal Inc.
Mr. Joe Werner, Urban Ecologist, Kansas City Power and Light Co.
Mr. John Strickler, Executive Director, Kansas Association for Conservation and Environmental Education
Mr. Brad Williamson, Olathe East High School, Monarch Butterfly Project

1:15 - 2:00 PM  Shareware  Richardson 203/205
1:15 - 2:00 PM  Student/Faculty Posters and Displays  Richardson 'Street'
1:30 - 4:00

CONCURRENT FIELD TRIPS
All trips will leave from Massman Hall parking lot. Please note participants of two field trips will miss the 4:00 sessions.
1. Powell Gardens - Large horticultural collection -- and walking tour of landscaped garden and nature trails. (BACK AT 5:00PM)
2. Negro Leagues Baseball Museum/ KC Jazz Museum
3. Bayer Laboratories - Animal research facilities
4. University of Kansas Museum of Natural History - Meet with curators of birds and mammals (BACK AT 5:00PM).
5. Linda Hall Library of Technology and Science - Rare book collection and tour of arboretum - walking field trip. (Current exhibit will be George L. Leclerc, Comte de Buffon, Histoire Naturelle)
6. Plaza Shopping Tour - Particularly for spouses - buses will deliver participants to the Plaza and pick them up for return to hotel or campus - self-guided
7. Kansas City Zoological Gardens and IMAX Theater - Buses will deliver participants to the Zoo front door, and pick them up for return to hotel or campus in time for 4:15 sessions or dinner, at the participant’s choice - self-guided (unless there are a large number of children, in which case Rockhurst will try to provide two student chaperones).

2:00 - 4:00 PM  CONCURRENT WORKSHOPS SESSIONS II
1. Developing Teaching Strategies for Case-Based Learning, Margaret Waterman, SE Missouri State University, and Ethel Stanley, Beloit College

4:00 - 4:15 PM  Afternoon Break (Refreshments)  Richardson 206
4:15 - 5:00 PM  CONCURRENT PAPER SESSIONS I
1. Linking Biology and Chemistry: A First Look, Buzz Hoagland, Westfield State College
2. Enriching the Science Curriculum of Homeschooled Children Through a Community Outreach Program, Mary Haskins, Rockhurst College
4. The Development of Inquiry-Based Outdoor Classrooms, Ed Story and Mike Quillen, UK-Maysville Community College
5. A Multidisciplinary Inquiry-Based Introduction to Science for Pre-service Teachers: Are Teachers Prepared to Teach Science? Terre Derting and Jimmy Dorris, Murray State University


5:30 - 7:00 PM  Posters, Exhibits, Social
5:45 - 6:30 PM  Social Hour (Cash Bar)
6:30 PM  BANQUET
7:30 PM  BANQUET ADDRESS:
The Anemone is Not an Enemy to the Clownfish, Dr. Daphne G. Fautin, Professor of Biology, University of Kansas

5:30 - 7:00 PM  Posters, Exhibits, Social  Richardson 206
5:45 - 6:30 PM  Social Hour (Cash Bar)  Massman Pub
6:30 PM  BANQUET  Massman Gallery (Massman Hall)

7:30 PM  BANQUET ADDRESS:
The Anemone is Not an Enemy to the Clownfish, Dr. Daphne G. Fautin, Professor of Biology, University of Kansas

9:00 - 10:15 PM  Curricular Issues Discussion (with cash wine/beer bar)
“Preparing Global Citizens”, Tom Davis, Session Organizer  Richardson 206

9:00 PM  Bus available to hotels  Richardson Front Door
9:00 - 12:00 PM  Jazz Pub Crawl - led by Phil Colombo, Assistant Professor of Chemistry, Rockhurst College  Richardson Front Door
10:15  Second bus will catch up with Crawl if enough discussants are interested  Richardson Front Door

Saturday, October 17th
8:00 - 9:15 AM  Buffet Breakfast (by Interest Groups; Bioscene Editorial Board; get food and take upstairs to M248)  Massman Gallery
8:00 - 9:15 AM  Bioscene Editorial Board, Ethel Stanley and Tim Mulkey, presiding  Massman 248
8:30 - 10:30 AM  ***Open Balloting***  Richardson entrance
9:00 - 11:30 AM  Zoological Gardens - Bus available for spouses/children leaves from in front of Richardson Science Center. Pick up is at 11:15 from Zoo Main Gate for return to campus.  Richardson Front Door
9:00 - 11:30 AM  Sustaining Member Exhibitors  Richardson 206
9:00 - 9:45 AM  CONCURRENT PAPER SESSIONS II
1. Burn-Out Revisited. Judith Brett, Hamilton Center and William Brett, Indiana State University  Richardson 302
2. Science Studio (A science intervention program for middle school girls). Faith Wilson, St. Teresa’s Academy  Richardson 315
3. What do your students say about evolution?: Nancy Sanders, Truman State University  Richardson 125
4. Teaching Sexual Differentiation: Beyond the Textbooks, Marc Roy, Beloit College  Richardson 306
5. Collaborative Case-Based Learning for Introductory Biology Students using Molecular Biology Computer Simulations and Internet Conferencing, Mark Bergland, UW - River Falls  Richardson 203

9:45 - 10:15 AM  Morning Break  Richardson 206
Posters, Exhibits, Refreshments
***Balloting Closes at 10:30 AM***

10:15 - 11:00 AM  CONCURRENT PAPER SESSIONS III
1. Problems of Teaching Large Numbers of Students in General Education Laboratory Classes Involving Many Graduate Student Assistants, Rita Ghosh, Indiana State University  Richardson 125
2. Gas Chromatography in the Non-Major Environmental Science Course, James Edmiston, Quincy University  Richardson 302
Concurrent Paper Sessions:


During the spring 1988 semester a chemistry faculty and I linked a second semester general chemistry course with a second semester introductory biology course. Sixteen students were co-enrolled in both courses that met for lecture MWF at 8:30 (General Chemistry II) and MWF at 10:30 (Biological Concepts). Students were given a survey designed to determine their understanding of the nature of the link between chemistry and biology at the beginning and the end of the semester. The extent to which each course was modified, the nature of the involvement by each faculty member, and student reactions will be discussed.

S.I.2. Enriching the Science Curriculum of Homeschooled Children Through a Community Outreach Program. Mary Haskins, Rockhurst College

Rockhurst College offers biology laboratories for middle and high school students who are homeschooled. Last year over 100 students attended a 10-week laboratory series held on our campus. The labs, which met once a week for 2 1/2 hours, provided hands-on experiences for students who may not have access to this type of scientific investigation. Benefits of the program include:

1) enhancing the science education of homeschooled children
2) enhancing Rockhurst’s visibility and reputation in the community
3) providing teaching experience for undergraduate students who work in the program
4) serving as a possible recruitment tool for our College.


Have you had students in your classroom with vision or hearing impairments, cancer, or hemophilia? Students such as these have different types of disabilities that need to be addressed when considering how your students will learn. Despite the fact that most biology educators have had students with some type of disability in their classroom, few institutions require their faculty to be formally trained about their role as educators when teaching students with disabilities.

We will present information to bring you up to date on what is required of the student with some type of disability and the teacher when designing lectures, exams, and laboratories. Specifically, we will address how teaching a biology course to students with disabilities can be very challenging as compared to courses in other disciplines. We will also provide helpful suggestions so that you will be better prepared when you realize you are teaching a student who cannot see, or perhaps, hear you.

S.I.5. The Development of Inquiry-based Outdoor Classrooms. Ed Story and Mike Quillen, UK-Maysville Community College

The presenters of this proposed session have developed a state award winning Outdoor Education Center at Ward Elementary School in Fleming County, Kentucky. Ward Elementary is located in rural Northern Kentucky.

The development of Outdoor Classrooms as a tool for Inquiry-based education is a viable option for today’s schools. The developmental process, beginning at site selection and ending in integrated cross-disciplinary curricula is both involved and rewarding. This session will...