

THE CENTRAL ARKANSAS



CHEMIST

The Newsletter of the Central Arkansas Local Section of the American Chemical Society

March/April, 2002

For our March meeting, which is actually being held in April, we welcome a neighbor from the University of Arkansas at Fayetteville, Dr. Collis Geren.

“All You Never Wanted to Know About the Brown Recluse Spider”

The venom of the brown recluse spider, *Loxosceles reclusa*, causes local and system-wide problems in bite victims. The local effects involve tricking the victim's own immune system into attacking normal cells. A particular class of white blood cells actually causes the nasty lesion characteristic of the spider's bite. The systemic effect induced by this spider's toxin apparently involves a dramatic and persistent effect on the cardiovascular system. Current work involves continued dissection of how the toxin induces the different effects at the molecular level.

A constant problem with working with any spider venom is scarcity of the appropriate venom. We are currently investigating alternatives to spider collection. These include recombinant DNA and tissue culture techniques.

We continue to investigate spider venom toxins specific for insects. Although long thought to be a presynaptic neurotoxin, crotamine and the similar toxins isolated from the various other spider venoms are actually toxic only in the presence of acetate. Investigations into the mechanism of this synergistic toxicity continue.

General Meeting

Tuesday, April 2

Arkansas Tech University
Pendergraft Library, Room 300 South

- 5:30 p.m. Dinner with Speaker
The Dixie Cafe, Russellville, AR
- 7:00 p.m. Program
Collis R. Geren
“All You Never Wanted to Know
About the Brown Recluse Spider”

Awards Banquet

Tuesday, April 16

University of Arkansas at Little Rock
Donaghey Student Center, Rooms B & C

- 7:00 p.m. Program
Central Arkansas Local Section
Recognition and Awards Banquet

*To obtain driving directions, visit
membership.acs.org/c/centralarkansas
or call 870-698-4315*



Speaker's Biographical Sketch

Collis R. Geren, is Dean of the Graduate School and Associate Vice Chancellor of Research for the University of Arkansas. He assumed this position in December 1991 after serving four years as chair of the Chemistry and Biochemistry Department and interim chair for the Department of Biological Sciences, both at the University of Arkansas. He is also the Coordinator of the Arkansas Biotechnology Center since 1987 and serves as a professor for the University of Arkansas since 1984.

Dr. Geren was honored as Who's Who in Frontier Science and Technology, Who's Who in the Southwest, NIH Research Career Development Award, 1986 Distinguished Alumni Award in Teaching and Research, and among American Men and Women of Science. He was also the recipient of the Mickey Mantle Scholarship, NEO A&M Science Scholarship and the NDEA Pre-doctoral Fellowship.

Dr. Geren has been involved with some forty-eight publications and is presently working on several projects that include biological and chemical characterization of venom components; protein purification and characterization techniques; monoclonal antibody technology; and biochemical pharmacology.

Looking Ahead

Even though the events in the month of April will wrap up our activities for the spring, be sure to mark your calendars for these events in the fall of 2002.

Sept. 17 "I Love a Chemystery,"
Thomas H. Crawford
(University of Louisville)

Oct. 28 "Boron: It's Not Just for
Rocket Fuels Anymore,"
Thomas A. Holme (University
of Wisconsin – Milwaukee)

November TBA

The *Chemist* may take a summer hiatus, but will definitely return in the fall. In the meantime, stay informed by visiting the section website.

National News

Chemical & Engineering News Online (<http://pubs.acs.org/cen>) offers free links to journal articles in a growing number of publications. Links to journal references in *C&EN* articles include not only ACS journals, but also journals published by the Royal Society of Chemistry (such as *Chemical Communications*) and *Angewandte* published by Wiley-VCH. Readers do not need to be subscribers to these journals to read the linked journal articles. Please contact Melody Voith, Online Editor, at 202-872-4406 if you have any questions.

The Winter 2001/2002 online edition of *Chemunity News*, the ACS newsletter that connects chemistry educators to the activities of the ACS Education and International Activities Division, is now available. This newsletter hopes to provide chemists interested in education programs with timely news about the programs and services at ACS and occasionally include some thought-provoking insights and commentaries on national issues in chemistry education. Visit www.acs.org/education.

Connections

The popular, new ACS Salary Comparator is posted on the ACS Department of Career Services website <http://center.acs.org/applications/acskomparator/page01.cfm> and is available for ACS members only. It can provide answers to your salary-related questions by providing current information applicable to specific employment situations.

This new tool reports the complete range of full-time base salaries being paid to ACS members in a variety of jobs. The comparator gives attention to many specific factors that influence pay, including experience, level of education, professional specialties, job functions, types of employers, and geographic location. Both academic and non-academic positions are covered.

The second edition of the comparator has been completely updated with new data from ACS employment surveys conducted in 2001. It is presented by the Committee on Economic and Professional Affairs and DCS.

Local Section News

As listed in the meeting schedule above, the Central Arkansas Local Section of the American Chemical Society will hold its annual recognition and awards banquet on Tuesday, April 16, 2002. Colleges and universities in our section are asked to recognize their outstanding students for the 2001-2002 academic year at this banquet. Please forward the names of those to be recognized to Derek McDowell at dmcowell@lyon.edu. Faculty members bringing the students are asked to "host" their students by providing brief remarks on their behalf and by covering the cost of their meals at \$10/person.

The Section will also recognize high school students and teachers, any 50-year ACS members, students "sponsored" by our section, and an outstanding section member. Certificates will be provided to all of those being recognized. All Section members are encouraged to attend and help honor these individuals.

If you plan to attend, please contact Marian Douglas (501-569-3152 or msdouglas@ualr.edu) by April 12.

ATTENTION: This Awards Banquet was established to recognize individuals within our local section. Historically, this event has involved honoring mostly those in academia. This event can, and should, also be used to recognize chemists in other sectors. If you would like to use this venue to recognize any individuals from your organization, please contact Derek McDowell so that arrangements can be made to include this individual in the evening's festivities.

As always, visit the section's website:

<http://membership.acs.org/c/centralarkansas>

to stay informed about section events and activities.

Points to Ponder...

Change is the law of the future. And those who look only to the past or the present are certain to miss the future.

--*John F. Kennedy*

Nothing's perfect, but maybe if I aim for perfect, I'll end up with really good.

--*Lynn Johnston, For Better for Worse cartoonist*

Never be afraid to sit awhile and think.

--*Lorraine Hansberry, Playwright*

All mankind is divided into three classes:

Those that are immovable.

Those that are movable.

Those that move.

--*Arab Proverb*

He who is ashamed of asking is ashamed of learning.

--*Danish Proverb*

THE CHEMIST'S APPROACH TO EXPLOSIONS!



The *Central Arkansas Chemist* is published as needed by the Central Arkansas Local Section of the American Chemical Society. Section Chair, Jeffrey Moran, Center for Toxicology and Environmental Health, 501-614-2834, jmoran@cteh.com; Chair-Elect, Cindy Moran, Arkansas State Crime Lab, 501-227-5747, cindy.moran@ascl.state.ar.us. Address all correspondence to the Section Secretary, Derek McDowell, Lyon College, 870-698-4315, dmcowell@lyon.edu. Newsletter contributions should be sent directly to the Section Secretary in electronic form. The Central Arkansas Local Section Web site is <http://membership.acs.org/c/centralarkansas>

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