

AMERICAN CHEMICAL SOCIETY

Central Arkansas Section

7:00 PM

Friday, February 18, 2000

Arkansas Tech University, Russellville
Ross Pendergraft Library and Technology Center, Room 300A (North)

Program:

The Mechanism of Toxicity of Linoleic Acid in Rabbit Renal Proximal
Tubular Cells

Jeffrey Moran

Department of Toxicology - UAMS

ABOUT THE SPEAKER:

Jeffrey Moran is the Chair-Elect for the Central Arkansas ACS Section. He has kindly agreed to substitute for an ACS tour speaker who cancelled at the last minute. Since receiving an ACS certified undergraduate degree in chemistry (Summa Cum Laude) from Arkansas Tech University, Jeffrey has been a graduate student in the Department of Toxicology at the University of Arkansas for Medical Sciences. His dissertation research dealing with the "Toxicological Significance and Cytochrome P450 Metabolism of Linoleic Acid" is being directed by Dr. David Grant.

In addition to presenting a technical talk, Jeffrey plans to use this meeting to introduce himself to local section members and discuss year 2001 plans for the section.

ELECTRONIC COMMUNICATION: Many of this month's meeting announcements were distributed by e-mail which resulted in significant savings for the section. If you received this by normal post, then I don't have a workable e-mail address for you. You can receive future mailings electronically by sending an e-mail to JerryM@mail.uca.edu.

HOW TO GET THERE:

The meeting will take place in room 300A (North) in the Ross Pendergraft Library and Technology Center. The Library is the new building on the North side of campus. After getting off I-40 at exit 81, go south on Hwy 7 about 600 yards. Turn right into campus at the north entrance, N. El Paso Street. Go straight at the stop sign -- the library is straight ahead when N. El Paso tees with West Q Street. Parking is available across W. Q Street from the library.

Dinner with the speaker will be at 6:00 PM at the Dixie Cafe which is at 105 E. Harrell Street. Turn left on E. Harrell about 75 yards south of I-40 at exit 81.

ABOUT THE PROGRAM:

My research investigates the importance of linoleic acid metabolism in human health. Linoleic acid is a major component of cell membranes and is metabolized in vivo to a variety of important products. The epoxides of linoleic acid can be formed by specific cytochromes P450 isoforms and have been associated with many pathological conditions in humans, including renal failure. Recent in vitro studies using the methyl ester have shown the diols of linoleic acid to be the toxic intermediate. My work tested the mechanism of toxicity of the free acid metabolites of linoleic acid. The results of these studies will be discussed during the seminar.

The Executive Committee of the local section met on Wednesday evening, January 19. Below are some highlights from that meeting.

LOCAL SECTION OFFICERS FOR 1999:

Chair:	Derek McDowell	(870) 698-4315	dmcdowell@lyon.edu
Chair-Elect:	Jeffrey Moran	(501) 686-5823	MoranJefferyH2@exchange.UAMS.edu
Treasurer:	Marian Douglas	(501) 569-3152	msdouglas@ualr.edu
Secretary:	Jerry Manion	(501) 450-5944	jerrym@mail.uca.edu
Councilor:	Ed Wilson	(501) 279-4513	Wilson@Harding.edu
Alt-Councilor:	Marty Perry	(870) 245-5217	perrym@alpha.obu.edu

WEB SITE: The section maintains a web page on a server provided by ACS. Go to membership.acs.org, click on **local sections** then **Central Arkansas**.

MEETING SCHEDULE: The following programs are planned for 2000: The speakers and dates are firm, the meeting places are not:

March 7	UALR	Dr. W. Bertsch	“Chemical Analysis of Fire Debris in Suspected Arson Cases.”
April 18	UCA		Awards Banquet
Sept. 19	OBU	Dr. Alan Cameron	Sex and the Single Gypsy Moth”
Oct 20:	Lyon	Dr. James Edwards	“The Inside Story of Color Photography”
Nov 5-11:	TBA		National Chemistry Week Industrial Tour

TRAVEL GRANTS: The Executive Committee approved the support of travel grants for high school chemistry teachers to attend the Biennial Conference on Chemical Education to be held in August at the University of Michigan, Ann Arbor. They appropriated \$100 per person up to a total expenditure of \$600. The application form is available on the section’s web site (above). Application forms are also available there for college student travel grants.

REGIONAL MEETING: The section has been asked to host the 2008 Southwest Regional ACS Meeting. Chair Derek McDowell is seeking section members who would be willing to participate in the planning of this event.

FINANCIAL REPORT: Treasurer Marian Douglas presented a financial report. The section began 1999 with a balance of \$8,359.39 and ended the year with a balance of \$7,409.44. Our primary sources of revenue are the local section dues (\$1,087.75) and a turnback from national dues (\$4,748). Major expenditures for the year included student travel grants (\$900), awards (\$740), newsletter (\$1,390), local meetings (\$1,140), travel subsidies (\$1,885), and other (\$795). The “other” included support of National Chemistry Week and the ACS Olympiad. Possible additional sources of revenue were discussed along with possible reductions in expenditures without reducing programs and services.

FROM THE CHAIR: Good day, fellow chemists! I hope this newsletter finds you doing well in 2000. I should first introduce myself to those members who don't know me. I am Derek McDowell, the chair of our Central Arkansas local section for the year 2000. I am an Assistant Professor of Chemistry at Lyon College in Batesville. Being that I have come full circle after graduating from Lyon, some would say that I have returned to my roots. I am also one of those young, gung-ho guys with lots of ideas. Who knows if they will come to be, but that won't stop me from trying? Nonetheless, I am hoping that I can share my enthusiasm with the rest of the local section. My plan is to regularly use this section of the newsletter to keep everyone informed of the things that I am trying to do.

We are all most likely aware of the problems vexing our local section. The most predominant one is the geographic separation amongst the membership. There is little we can do about the defined boundaries of the section, but one of my goals is to improve the communication channels within the section, most likely via the Internet. I want our local section web site to be an information hub that members can visit to find out what's going on in their area of the local section. I would like for the web site to make available a directory of our membership, complete with e-mail addresses. With the advent of electronic mail, it only makes sense that we utilize it to improve communication within the local section.

Another plan that I have for the web site involves the many Student Affiliates of the ACS chapters around the state. Currently, our local section web site contains links to the SAACS web sites, if they exist. These student organizations regularly host seminar speakers on their campuses. I am in the process of asking each chapter to make available, via their web site, its seminar schedule. This will allow the membership to find out about chemistry-related seminars within their area of the section, so that they might attend.

Another thing that I feel the section needs is media coverage. I hesitate to say more media coverage, in that I sense there is none to begin with. I am sure that there are many chemists in our local section doing many good things. I feel that they deserve some recognition for their efforts. The obvious problem is that if we are unaware of their actions, we are unable to give them the credit they have earned. Again, I hope to use the web site for noteworthy submissions, as well as, dissemination of the commendations.

As I close, I ask myself, "Am I taking this chair position too seriously?" I have only been a member of this local section for two years, so please advise me if I have misjudged the situation. I do not claim to know everything, nor do I claim to have all the answers. I am also aware that not all goals are attained, but I firmly believe that setting them and striving for them will lead to progress. I am of the opinion that this local section needs to serve its membership better. That is my primary goal as the chair of the Central Arkansas local section. So, if there are any ideas out there within the membership, I will more than welcome input; I will do my best to act upon them. Please make note of my contact information provided in this newsletter, and share your thoughts with me!

NATIONAL CHEMISTRY WEEK REPORT: Hello, it's me, Derek McDowell, again, but in a different capacity. National Chemistry Week for 1999 was Nov 7-13. I was the NCW Coordinator for our local events here in Batesville area, in addition to distributing NCW supplies to different individuals within the local section. Our local activities involved the employees of Arkansas Eastman hosting their annual junior high science and senior high chemistry Quiz Bowls, as well as supplying prizes to the local radio station for chemistry trivia contests. The Arkansas Eastman crew made visits to the local high schools, while the Lyon College students visited the elementary schools in Batesville. On the Lyon College campus, the Student Affiliates labeled each day of NCW with a specific

theme, such as Safety Glasses Day and ACS T-shirt Day. Our week culminated on Friday with Dress as Your Favorite Element Day. We had so much fun with this, we hope to get the whole local section to participate in this next year. Please visit the Lyon Student Affiliate web site to see some of the creativity that emerged. Because I submitted this information as a Phoenix Award Entry, the Central Arkansas local section got some press. Did anyone notice the 4th paragraph in the third column on page 42 of the Dec. 20, 1999 issue of C&ENews?

I also want to use this space to acknowledge some other local section members for their efforts during NCW. Marian Douglas of UALR arranged for a group to visit the local high schools. Chris Hill, a student at Harding University, along with Ed Wilson coordinated visits to elementary and high schools in Searcy to do experiments and "magic tricks" in order to increase chemistry awareness. They also arranged a segment on a local radio station where answering the chemistry question of the day would win a nice ACS Polo shirt. Steve Zimmer of Arkansas Tech, as he has done for some time now, entertained over 400 5th graders in the Russelville area. He says that the kids really enjoy the materials that he distributes, and the teachers tell him that each year the students look forward to NCW because they get excited about science. I am sure that there were others besides these mentioned here that were active during NCW, but these are the ones that I am aware of. These members, as well as everyone who contributed to the celebration of chemistry during NCW, deserve a big "THANK YOU."

It is true that NCW for 2000 is 9 months away, but I am already planning for it. In the preparation of this year's speaker service from the ACS, it was decided that rather than hosting a speaker in November, the local section would sponsor a tour of some local industrial plant or state department in conjunction with NCW. During the planning stages, no particular site was identified, so this is a call for volunteers. If there are any chemists in our local section who would like to open up their facility for such an event in November, please contact me. NCW 2000 will be here before we know it, so the sooner we start planning, the more successful our events will be.