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DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

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Department and Professor Get Civilian Awards



Top: Bill Durham accepts the department award from Andrea Staley. Bottom: Staley presents the Patriot Award to Wes Stites.



The **department** and Professor **Wes Stites** received awards from the Employer Support of the Guard and Reserve (ESGR) organization of the Department of Defense (DOD) for leadership and personnel policies that support employee participation in the Guard and Reserve. Andrea Staley, the NWA chair of ESGR presented the awards at a department seminar in October.

Stites received the Patriot Award for his support for service in the National Guard and Reserve. He was the doctoral advisor for alumnus **Jeff Froude Ph.D. '08**, who is a captain in the Integrated Toxicology Division serving active duty in Maryland. Froude pursued his Ph.D. while continuing to serve.

Stites, who has never been a member of the armed forces, has consulted for the U.S. Army about biological and chemical weapons. This month he was the race organizer for the Veteran's Memorial 5K race hosted by the Regional National Cemetery Improvement Corp., which aims to

expand the property borders of the Fayetteville National Cemetery.

The department received the Above and Beyond Award, which recognizes employers at the state and local level who have gone above and beyond the legal requirements for granting leave and providing support for military duty by their employees.

Military Connections

Current graduate students **Steve Gann** and **Roger Williams** both served.

Gann retired as captain in the U.S. Naval Reserves, where he spent six years active duty, including being recalled after 9/11.

Williams did two, four-year tours in the U.S. Air Force. He served as an electronic warfare systems specialist, electronic warfare military training instructor and was promoted to E5 staff sergeant.

Veteran's Day is Nov. 11.

Millett Continues Success with NIH

Frank Millett and **Bill Durham** received an NIH grant for "Electron-Transfer Proteins," for more than one-half million dollars. With this competitive renewal, this grant has been continuously funded since 1973. It is likely the longest running NIH grant on campus.

The grant supports a study of the elementary electron-transfer processes that are involved in respiration. One aspect of the process that remains unresolved and will be a focus is the manner in which protons are pumped across the mitochondrial inner membrane. The proton gradient that is created through this pumping is required to convert ADP to ATP, the primary source of energy for many biological processes. The project involves the use of a variety of ruthenium(II) complexes that allow the reactions of interest to be triggered by a short laser pulse and studied over a range of times from nanoseconds to seconds.

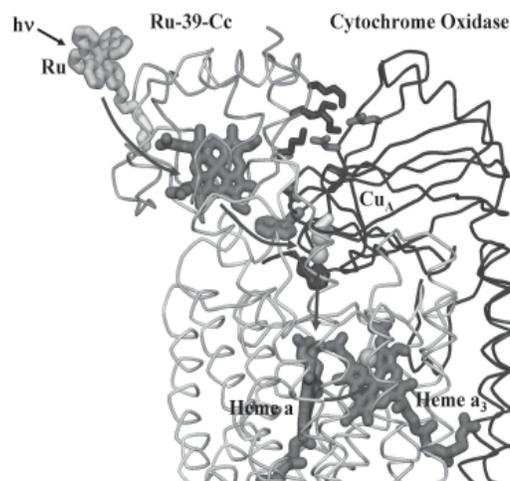


Figure: Electron Transfer from Ru-39-Cc to Cytochrome Oxidase

Faculty News

Research News

The *International Journal of Mass Spectrometry* has published a special issue in honor of Distinguished Professor **Charles Wilkins** – “Leading-Edge Mass Spectrometry and Applications: A Special Issue Honoring Charles L. Wilkins on the Occasion of his 70th Birthday,” vol. 287, issues 1-3 - selected pp. 1-134 (15 October 2009). The Symposium to Honor Charles L. Wilkins took place on campus in fall 2008. The special edition is available online at <http://tinyurl.com/yb2ydney>

Julie Stenken co-edited a book on glucose monitoring entitled *In Vivo Glucose Sensing* with David A. Cunningham of Abbott Laboratories. The book is designed to provide state-of-the-art information on glucose monitoring to clinicians and medical educators. There are 15 chapters by various authors, including Stenken.

Collaborative work from the **Adams** and **Kumar** labs produced “NMR Characterization of Copper and Lipid

interactions of the C2B Domain of Synaptotagmin I - Relevance to the Non-Classical Secretion of the Human Acidic Fibroblast Growth Factor (hFGF-1),” which has been accepted for publication and is in press in the journal *Biochimica et Biophysica Acta (BBA) - Biomembranes* doi:10.1016/j.bbamem. 2009.09.024

On the Go

Bob Gawley attended the Atlantis Project Director’s conference in Boston, Oct. 11-13.

Suresh Kumar, Frank Millett and graduate student **Lindsay Rutherford** will attend the 2009 Southeast IDEa regional meeting in Charleston, S.C., Nov. 9-11.

Kumar will present a poster “Understanding the Mechanism of the Anti-angiogenic Activity of Suramin.”

Rutherford will present a poster “Understanding the Molecular Mechanism Underlying the Auto Inhibition of the Fibroblast Growth Factor Signaling.”

Matt McIntosh attended the Welch Conference: Advances in Synthetic Chemistry, Oct. 26-27 in Houston.

Members of his lab who also attended were **Sefat Alwarsh, David Clay, Silvana Dormi, John Hutchison, Juliette Rivero, Stefan Ruider** and **Maha Shrestha**.

Peter Pulay and **Tomasz Janowski** attended the 18th Conference on Current Trends in Computational Chemistry (CCTCC) at Jackson State University.

New Faculty Hire

The search is on for an assistant professor in either the physical or the inorganic division. The position is one of 17 campus-wide tenure-track faculty positions created by Provost Sharon Gaber “to educate our students and move them toward graduation in a timely manner.”

The search committee is comprised of **Dan Davis, Bob Gawley, Peter Pulay, Julie Stenken** and **Ryan Tian**.

Fulbright IT Adds Staff

The Fulbright computer support team added two staff members this fall.

Chris Clanton joins the college as a Computer Operator. He has been working in IT support since high school. In college



Chris Clanton

he studied cultural anthropology and archaeology at Hendrix. Prior to joining the university, he lived in Nanjing, China, where he taught information and communication technology and general science. When he’s not offering technology support, he enjoys learning digital design and watching nature documentaries.



Rusty Scoggins

Rusty Scoggins joins the college as a Technical Assistant II. His IT interests go back to the Apple II C with Duodisk – Vintage 1982. He is a Microsoft partner, DCSE, Class 3 systems engineer, Level 4 Technician, Apple developer, and lover of all things natural. His interests include cycling, quantum and biologi-

cal computing, robotics and mobility theory, and remote control helicopters, which includes building, modification, and flying. He has one son, age 14.

Current Fulbright IT Services Staff

Windows PC and Macintosh Client Support

- **Teresa Waddell**, Computer Support Specialist
- **Chris Clanton**, Computer Operator
- **Niriha Kadabmi**, Technical Assistant II
- **Josh Duncan**, Technical Assistant II
- **Rusty Scoggins**, Technical Assistant II

SmartRoom and Audio/Visual Support

- **Roy Swaty**, Project/Program Specialist

UTIS Network Client Services (NCS) Staff

provided by NCS Manager **Marie Riley**

- **David Stowers**, Computer Support Specialist
- **Les Seigneur**, Computer Support Specialist
- **Will Cooksey**, Computer Support Specialist
- **Adrienne Lopez**, Computer Operator

Contact Information

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Student News

Students Pass Cume

Derrell Walters and **Roger Williams** have now passed the appropriate number of cumulative exams to enter the doctoral program. Walters is in the Heyes lab and Williams is in the Tian lab.



Derrell Walters



Roger Williams

Schlieff Gains All Conference Honors

Senior **Kim Schlieff** was one of two members of the university soccer team to earn All-Southeastern Conference (SEC) honors. Schlieff was named second-team all SEC by the league's coaches. She started all 19 games this season — one of only three Razorbacks to do so. The team finished 8-7-4 this season giving the program consecutive winning seasons for the first time in school history. The soccer team began in 1986.

Arkansas INBRE Research Conference

The department again co-hosted the Arkansas INBRE Research Conference with the departments of biological sciences and physics October 23-24, 2009 in Fayetteville.

Undergraduate **Ryan Bauer** received 2nd place in the chemistry oral competition. Former INBRE summer student **Kirt Durand**, University of Arkansas at Pine Bluff, won 1st place in the same section. Only six students from each division were invited to give oral talks. Awards are only given for oral and poster presentations in the undergraduate category.

Other university students to win awards were **P. Blake Chism**, 2nd place biology poster division and HHMI students **Ameé Salois**, 1st place physics oral division, **Rachel Lee**, 1st place physics poster division.

Other department students and researchers making poster presentations were **Anna Daily**, **Rohana Liyanage**, **Lindsay Rutherford**, and undergraduates **Joshua Brown**, **Cory Garren**, **Amir Mortazavi** and **Natalie White**.

Special thanks to the Candlewood Suites, Chartwells, Clever Gifts, the Cosmopolitan Hotel, Eventures Party Rentals, the Fayetteville Town Center, the Flying Burrito, the Inn at Carnall Hall, Mailco USA Inc., PMC Solutions, Rick's Bakery, University of Arkansas Global Campus, University Relations and VWR.

Save the Date! The 2010 Arkansas INBRE Research Conference will be October 15-16, 2010 in Fayetteville. For more information see <http://chemistry.uark.edu/1733.htm>.

Rupar Weds

This summer **Chris Rupar** wed Stacey Clay at Thorncrown Chapel in Eureka Springs. He is a graduate student in the Millett lab. She is a graduate student in the Clinical Mental Health counseling program and works for International Admissions.



Mr. and Mrs. Rupar

New Forms Online

Students now have another resource to aid in registration. Drop/add and credit request forms are available on the department Web site.

Rained Out

An unusually wet October postponed the department picnic twice before it was finally suspended until next fall. This is the first time in recent memory that the picnic has been called off for any reason.

Kickin' Moles Update

The Kickin' Moles continue their kickball quest, despite being rained-out of many of their games. The team, with late addition VWR's Stephanie Huffines, has played make-up games, sometimes on the weekends. With a 6-4 record, the team now enters the post season. They will play in the first round Monday, Nov. 9. If they win, they will play elimination rounds Tuesday with the championship game later that night.

Safety Tip

**Update your inventory!
It is the law and a benefit
to your lab.**

Calendar of Events

November

02.....	Priority registration for spring 2010
02.....	Department seminar
09.....	Department seminar
13.....	Vendor show
16.....	Department seminar
20.....	CUME
23.....	Department seminar
25.....	Fall break, no classes, university is open
26-27	Thanksgiving holiday, university is closed
30.....	Department seminar

December

04.....	CUME
07.....	Department seminar
08.....	Last day of fall classes
08.....	Last day to officially withdraw from all courses
09.....	Dead day, no classes
09.....	Department potluck
09.....	Final copies of thesis/dissertations must be submitted to the Graduate School for December graduation
10-16	Final exams
24-31	University closed

The above dates and campus and area events are listed on the department's Blackboard site <https://courses.uark.edu/>

Fall Break

The University of Arkansas will be CLOSED for the Thanksgiving Holiday Thursday, Nov. 24 -25. Note that there will be no classes, Wednesday, Nov. 23 but the university will be open.

Life Science Product Show

Scientific Solutions Events will host a vendor show Nov. 13, 2009 from 11:30 a.m. to 1 p.m. in CHEM 105 and the administrative suite.

This exhibit will showcase new and emerging technologies from a wide array of suppliers, with an emphasis on products/services aimed at reducing research costs. Enter a raffle to win an iPod Shuffle.

November Birthdays

07.....	Ashley Ramsey
07.....	Bob Gawley
08.....	Kwangyul Moon
09.....	Marilyn Davis
12.....	Ingrid Fritsch
15.....	Nicole Richardson
18.....	Dale Johnson
22.....	Daniel Eddings
23.....	David Paul
24.....	Erika Von Grote
27.....	Chris Rugar
28.....	Sun Waldron

The publishing of birthdays is not intended to invade the privacy of anyone. If you prefer not to be included, please let us know.

Library Hours

CHBC Library (CHEM 225)
<http://libinfo.uark.edu/chemistry/>

Regular fall hours

Monday-Thursday	8 a.m. to 9 p.m.
Friday	8 a.m. to 6 p.m.
Saturday	CLOSED
Sunday.....	2 p.m. to 6 p.m.

Exceptions to fall hours

November 24-25	8 a.m. to 5 p.m.
November 26-29	CLOSED

CUMES

The cumulative exams for graduate students will be the following Fridays from 5 p.m. to 6 p.m. in CHEM 144

Fall

- November 20
- December 4

The department of chemistry and biochemistry at the University of Arkansas strives for excellence in research, teaching and service in chemistry—the central science.

We aspire to positions of leadership regarding the discovery of new scientific knowledge, the training of students, and the economic development of the State of Arkansas.

We seek to recruit and retain a diverse group of the best faculty, students and staff to address the challenges of the future through interdisciplinary and multidisciplinary research and education.