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Summer Students Hit Record Number

This summer there are a record number of undergraduate students researching in labs. In addition to the REU, INBRE and HHMI students, 44 university chemistry majors are participating in the COBRE Summer Research Experience for Students and Educators funded by the Center for Protein Structure and Function.

Frank Millett is the director of the COBRE program. **David Paul** and **Julie Stenken** are the program coordinators of the chemistry and biochemistry REU, and Arkansas INBRE summer program. Paul is also the program director of the HHMI program. **Leslie Johnson** is the support staff for the 84 students in the above programs.

COBRE REU students

Amanda Anderson	Jared Morpew
Kristi Anderson	Shannon Mumma
Natalie Brown	Brittany Pasierb
Joe Bruton	Kyle Peterson
Bethany Campbell	Hannah Rabon
Joesph Courtney	Kevin Regis
Clarence Dye	Kara Robertson
Andrew Gibson	Tyler Rogers
Lauren Hall	Ashley Rosenberg
Ali Haydar	Omar Salem
Rory Henderson	Jonathan Schmidt
Hannah Henson	Matthew Sharum
Lukas Hockman	Ryan Shinabery
Tony Hoyt	Mary Smith
Sigrid Johannesen	Kyleigh Strickland
Matthew Kern	Lauren Taylor
Shigehiro Komatsu	Galen Tobey
Matthew Marks	Gavely Toor
Ashley Martfield	Daniel Vo
Sarenthia	David Williams
McClelland	Matt Williams
Sean Mellon	Whitney Young
Kyla Morinini	

Key Division Elements Retire

As of July 1 the biochemistry division is short 50 years of experience with the retirements of **Lois Geren**, Ph.D. '81, and **Marilyn Davis**.

Their contributions in leadership and support have aided the division and department. Both mothers at home came to be mothers in the office as well, mentoring many students and researchers over the years.



Lois Geren



Marilyn Davis

Miladinovic Defends Dissertation



Sasa Miladinovic

Sasa Miladinovic successfully defended his doctoral dissertation "Fourier Transform Mass Spectrometry of Polymers and Copolymers" June 2 under the direction of **Charles Wilkins**.

Miladinovic is from Kragujevac, Serbia, and has a degree from the University of Kragujevac.

He is a postdoc for Yury Tsybin at the EPFL Institute at the University of Lausanne, Switzerland.

Faculty News

Neil Allison completed his term as chair of the university Faculty Senate June 30. Allison continues as vice chair of the department and Liebolt Chair of Premedical Sciences.

Publications

“Highly Sensitive Voltammetric Speciation and Determination of Inorganic Arsenic in Water and Alloy Samples Using Ammonium 2-Amino-1-Cyclopentene-1-Dithiocarboxylate,” **Ensaifi, A. A.; Ring, A. C.; Fritsch, I.** *Electroanalysis* 2010, 22, 1175-1185.

“Overview of Carbanion Dynamics and Electrophilic Substitutions in Chiral Organolithium Compounds,” **R. E. Gawley**, in “Stereochemical Aspects of Chiral Organolithium Compounds,” R. E. Gawley, Ed., Vol. 26 in *Topics in Stereochemistry*; pp. 93-133; Verlag Helvetica Chimica Acta: Zürich, 2010.

“Signal Amplification in a Microchannel from Redox Cycling with Varied Electroactive Configurations of an Individually-Addressable Microband Electrode Array,” **Penny M. Lewis, Leah B. Sheridan, Robert E. Gawley, Ingrid Fritsch**, *Anal. Chem.*, 2010, 82, 1659-1668.

“Novel Modulator of $\text{Na}_V1.1$ and $\text{Na}_V1.2$ Na^+ Channels in Rat Neuronal Cells,” H. Mao, L. A. Fieber, **R. E. Gawley**, *ACS Med. Chem. Lett.* 2010, 1, 135-138.

On the Go

NIH, NCRR Third Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), Bethesda, Md. June 16-18.

The following posters were presented.

Frank Millett presented “Detection of a Proton-Dependent Electron Transfer From CuA to Heme a of Cytochrome C Oxidase Mutant S44E using Ruthenium Photoexcitation.”

Colin Heyes presented “Single Molecule Fluorescence Techniques for Biomedical Research.”

Graduate student **Chris Saunders** presented “Development of Proteomic Methods for the Discovery of Proteins Containing Methionine Sulfoxide.”

Neil Allison traveled to Sweden in June with the university Health Teams Abroad group.

Chemistry major **Alyse Allison** was among ten university students in various fields to participate.

Colin Heyes presented a poster “Connecting the Macroscopic and Microscopic Optical Properties of Quantum Dots for Single-Molecule Biophysical Applications,” at a Gordon Research Conference June 27-July 2.

Peter Pulay gave opening talk “Accurate Calculation of Pi-Pi Stacking Interaction,” at the Harry King Symposium in Buffalo, N.Y. May 10-11.

Pulay gave another invited talk “Laplace Transform Calculation of the Perturbational Triples (T) Contributions,” at the Molecular Quantum Mechanics 2010 meeting, in Berkeley, Calif. May 24-29.

Joshua Sakon will give a talk “Medical Applications of Collagen Binding Domain from Gas Gangrene Causing Collagenase,” at the 57th Toxin Symposium in Nagahama-shi, Japan July 14-16.

Julie Stenken served on the NIH Enabling Bioanalytical and Biophysical Technologies (EBT) Study Section in Washington D.C. June 10-11.

Graduate student **Mack Clements** presented a poster “A Catalytic Method for the Preparation of 2,3-Disubstituted Indoles,” at a Gordon Research Conference in June.

Patents

Instructor **Mya Norman** was granted a U.S. Patent 7718047 “Electrochemical High Pressure Pump” May 18.

Norman shares this with co-inventors, Carl A. Koval, Christine E. Evans and Richard D. Noble.

The invention is licensed to SFC Fluidics and was made possible with the assistance of the Technology Transfer office at CU-Boulder.

From the Library by Luti Salisbury

A poster exhibit of the scholarly achievements of Drs. Kumar and Tian, who recently were granted tenure and promoted to associate professors, is on display in the Chemistry and Biochemistry Library (CHEM 225).

The displays highlight their publications, publication productivity by year, two top cited papers, two of their recent publications, collaborators and collaborating institutions and the journals in which they published ranked by the number of publications in them. The display also has a snapshot of the number of times their publications were cited each year and their H-indexes. The H-index is used to measure the productivity of an individual, group or institution. An index of 20 indicates that an author or group of authors have 20 publications which received 20 citations or more.

Check-out our newest site on safety that has resources relating to lab and radiation safety. Please submit your favorite resources to Luti Salisbury (lsalisbu@uark.edu) if it is not on this guide. <http://uark.libguides.com/safety>

The libraries have recently added access to the Reaxys Chemistry database from Elsevier, which provides access to chemistry information dating back to the 18th century.

- **Beilstein** - organic carbon compounds, drawn from the journal literature back to the 18th century.
- **Gmelin** - inorganic and metal-organic compounds, drawn from the journal and patent literature back to the early 19th century.
- **Patent Chemistry Database** - A combined file of English-language patents, supplemented by older patents drawn from Beilstein and Gmelin.

Safety Tip

If you must remove a hood sash component return it ASAP. The hoods are designed to work with all windows in place.

Student News

Undergraduate Degrees Awarded

Bachelor of Arts

Ashley Brown
Rachel McCorkle
Kimberly Schleif

Bachelor of Science

Maher Abulibdeh
Khanh Do
Andreas Eiberweiser
P. Ford
Thomas French
Amy Harsh
Mary Howard
Isabelle Huber
Matthias Knust
Rosalba Ocampo
Keila Payne
Mallorie Sloan
Brian St. Clair
Peter Tran
Sidney Winford *Magna Cum Laude*

Four Year Honors Scholars

Andrew Avery *Summa Cum Laude*
Geri Burkett *Magna Cum Laude*
Jacob Burns *Magna Cum Laude*
Andreas Chen *Magna Cum Laude*
Thomas Fleri *Cum Laude*
Rodney LaGrone *Magna Cum Laude*
Jaime Nelson *Magna Cum Laude*
Courtney Peterson *Cum Laude*
Iryna Polyakova *Magna Cum Laude*
Latisha Puckett *Cum Laude*
Christina Ragland *Summa Cum Laude*
John Sherrill *Cum Laude*
Jessica Sutton *Cum Laude*

Departmental Honors

Ryan Bauer *Cum Laude*
Ryan Boswell *Cum Laude*
Joshua Brown *Cum Laude*
Kaitlin Castleberry *Cum Laude*
Courtney Chandler *Cum Laude*
Cory Garren *Cum Laude*
Katie Hamblin *Cum Laude*
Kellie Ong *Summa Cum Laude*
Olena Pickett *Summa Cum Laude*
Elizabeth Srader *Magna Cum Laude*
Hiroko Takeuchi *Cum Laude*
Natalie White *Cum Laude*

Minor in Chemistry

Amanda Cains
Christopher Scarborough *Summa Cum Laude*

Fulbright College Dean's List

This spring 73 undergraduate chemistry majors, or 26%, made the Fulbright College Dean's list for earning a 4.0 GPA during the semester.

Shaun Adams
Alyse Allison
Andrew Avery
William Bickell
Thomas Broja
Rose Brorsen
Joshua Brown
Kaitlyn Bryant
Courtney Cagle
Amy Carr
Kaitlin Castleberry
Courtney Chandler
Brooke Chaney
Stephen Dalby
Arshan Dehbozorgi
Samuel Dunn
Amir Francis
Cory Garren
Tristan Geis
Lauren Hall
Ross Harmon
Ali Haydar
Casey Henderson
Rory Henderson
Hannah Henson

David Hopkins
Lawrence Hoyt
Sigrid Johannesen
Thomas Jones
Devin Kennedy
Kelsey Knewton
Rodney LaGrone
Rebekah Langston
Jacob Lavender
David Lee
Ashley Martfeld
Matthew McMahan
Rhys Moore
Shannon Mumma
Devin O'Dea
Kellie Ong
Kaila Pianalto
Andrew Price
Derek Pyland
Daniel Rackl
Christina Ragland
Ettore Rastelli
Clint Riley
Kara Robertson
Jeffrey Roeser

Stefan Ruider
Sara Schneider
Matthew Sharum
Ryan Shinabery
Colby Smith
Kelsey Sparks
Elizabeth Srader
Gayatri Suresh Kumar
Jessica Sutton
Daniil Tchakhalian
Galen Tobey
Julie Tran
Peter Tran
Jake Uery
Kirby Welston
Natalie White
David Williams
Caitlin Williams
Sidney Winford
Peter Wolfenberger
Jacob Wooldridge

** List does not include those students with FERPA restrictions*

Athletic Department Honor Roll

Kim Schleif, soccer, and **Ben Skidmore**, men's track and field, were among the nearly 200 Razorback student-athletes who posted a 3.0 GPA or above for the 2010 spring semester earning a spot on the athletic department honor roll.

Beuterbaugh Wins Wing Challenge

In June, graduate student **Aaron Beuterbaugh** took home the trophy at a local wing-eating contest after consuming one dozen hot wings in three minutes.

Beuterbaugh, graduate student **David Clay** and postdoc **Dan Eddings** were among four finalists selected after winning preliminary rounds this spring.

Wingfest is sponsored by a local radio station with proceeds benefiting the Alzheimer's Association and Seven Hills Homeless Shelter.

Staff News

Administrative Support Supervisor **Heather Jorgensen** was elected to the Staff Senate as an at-large representative. Her three-year term began July 1.

The Staff Senate was officially recognized by the Board of Trustees in 1995 to act as a representative organization for classified and non-classified staff at the Fayetteville campus, and to participate in institutional policy matters affecting staff.

At right: Heather Jorgensen



Calendar of Events

July

- 01..... Last day to drop a SSII course without a "W"
 05..... Independence Day, university closed
 22..... Summer student combined poster session and luncheon
 23..... Scientist Solutions vendor show
 26..... Last day to drop a SSII class with a "W"

August

- 06..... Last day SSII
 22..... Last date to receive 100% cancellation of fees for an official withdrawal for fall 2010
 23..... First day fall semester
 27..... Last day to register or add a full semester class
 30..... Fall seminar series begins

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

Summer Student Poster Session

Summer students in the REU, INBRE and HHMI programs will make poster presentations on their research Thursday, July 22 from 10 a.m. to noon at various locations on the second floor of the Chemistry Building. Luncheon to follow in CHEM 105 and 119.

Life Science Tech Exhibit

Scientist Solutions Events will host a Life Science Tech Exhibit to showcase new and emerging technologies launched in early 2010, Friday July 23, 11:30 a.m. to 1 p.m. in CHEM 105

All are invited and to drop by to visit with vendors including VWR International, Gilson, BioTek, RAININ, EMD, IDT and Sanyo.

Let the Music Play

Check out the university Libraries' collection of American Song Online
<http://libinfo.uark.edu/eresources/help.asp?TitleCode=AlexStAMSO>

This is a unique compilation of almost 100,000 recordings of country, folk, bluegrass, and gospel to jazz, old-time, American Indian, children's songs, and more. Coverage includes songs from the pre-colonial period to modern day.

American Song online includes recordings from labels like Folkways, Smithsonian, Stax, Arhoolie and artists such as Patsy Cline, Rosetta Tharpe, Johnny Cash, Leadbelly, Louis Jordan and Clifton Chenier.

Clean Air Act to be Enforced August 1

Attention smokers, smoking on campus will be illegal under new state law going into effect August 1. This new law means that university police officers can and will write tickets to anyone caught smoking on campus property. Violators of the state "Clean Air on Campus Act of 2009" will be subject to a fine of not less than \$100 and no more than \$500.

The campus has been tobacco free as outlined by policy since mid-summer 2008. It was one of the first major institutions of higher education in the country to prohibit all tobacco use, including smokeless tobacco, on all campus property.

July Birthdays

- 01.....Roger Koeppe
 10.....Mack Clements
 15.....Aaron Beuterbaugh
 20.....Joshua Sakon
 24.....Anupama Aggarwal
 27.....Anna Daily
 29.....Marv Leister

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>

Summer hours (May 17 - August 18)
 Saturday-SundayCLOSED
 Monday-Thursday8 a.m. to 6 p.m.
 Friday8 a.m. to 5 p.m.

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.