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DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

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Chem Major Voted Homecoming Queen



Henson waves after being named Queen at a pep rally at the Greek Theatre.

Senior honors student **Hannah Henson** was voted 2010 Homecoming Queen.

She was crowned during the Homecoming football game October 30 by Chancellor G. David Gearhart and President of the Republic of Panama, Ricardo Martinelli Berrocal, who are both alumni.

Henson is in the **Kumar** lab where she participated in the 2010 COBRE REU summer program and received a SURF grant for her research "Investigation of W121 on the Conformation and Functional Properties of the Human Acidic Fibroblast Growth Factor-1," under mentor **Anna Daily**.

She received the American Chemical Society award and the Honorary Scholar recognition in 2009, and continues to make the Fulbright College Dean's list.

She is a graduate of Lake Hamilton High School, where she participated in track, swimming and volleyball.



From left: Chancellor G. David Gearhart, Hannah Henson, President of the Republic of Panama, Ricardo Martinelli Berrocal, and 2009 Homecoming Queen Kimberly Smith.

Photos courtesy of the Office of Admissions

In 2007, she was selected as one of six national Wendy's High School Heisman winners, and was awarded the National SAMMY (Scholar Athlete Milk Mustache of the Year). She was also named the State Female Scholar Athlete of the Year Arkansas Democrat-Gazette.

Henson has continued to excel since

arriving on campus as a Bodenhamer Fellow. She is an Honors College Ambassador, a member of Gamma Beta Phi Honor Society and Golden Key National Honour Society and is active in Kappa Kappa Gamma sorority where she has received awards for her service. She has also participated in study abroad.

Ong Defends



Grace Ong defended her doctoral dissertation "Purification and Surface Studies of Colloidal Semiconductor Nanocrystals," November 10 under her doctoral advisor Xiaogang Peng.

Ong is from Klang, Malaysia and has a B.S. in chemistry from the University of Arkansas where she graduated magna cum laude.

At left: Grace Ong

Faculty News

Grants Awarded

Bob Gawley received an NSF grant for “Dynamics of Chiral Organolithiums: Enantiomerizations and Resolutions.”

Ryan Tian received an NSF grant for his project “Synthesis of Hyperbranched Copolymers on Novel Nanostructures for Polymer Electrolyte Fuel Cells Applications.”

Research News

A paper published by the Zheng lab in *Organic Letters* was noted as the most read article in the journal in August.

“Fe(II)-Catalyzed Amination of Aromatic C-H Bonds via Ring Opening of 2H-Azirines: Synthesis of 2,3-Disubstituted Indoles,” **Jana, S, Clements, MD; Sharp, BK; and Zheng, N.**; has also been selected by the Editorial Board of *SYNFACTS* for publication.

Research from the Koeppel group was published in the *Journal of the American Chemical Society* and the *Journal of Biological Chemistry*.

Yu, Haibo; **Christopher L. Mazzanti**; Troy W. Whitfield; **Roger E. Koeppel II**; Olaf S. Andersen; and Benoît Roux; (2010) *J. Am. Chem. Soc.* 132,

10847-10856. “A combined experimental and theoretical study of ion solvation in liquid N-methylacetamide.”

Vostrikov, Vitaly V., Anna E. Daily, Denise V. Greathouse, and Roger E. Koeppel II (2010) *J. Biol. Chem.* 285, 31723-31730. “Charged or Aromatic Anchor Residue Dependence of Transmembrane Peptide Tilt.”

On the Go

GRASP NMR Meeting
Kansas University, Oct. 29-30.

Suresh Kumar, Paul Adams, post-doc **Srinivas Jayanthi** and graduate students **Nick Gleason, Ryan Thurman** and **Vitaly Vostrikov** attended.

Kumar was on the conference organizing committee and chaired a session. He gave a talk “Structure-Function Relationship of Fibroblast Growth Factors.”

Adams presented “Characterization of Molecular Details of RAS-related Proteins That Highlight their Diverse Roles in Cell Signaling Activity.”

Vostrikov presented “Application of Transmembrane Peptides to Investigation of Protein-Lipid Interactions.”

Jayanthi presented a poster “A Structure Based Design of a Novel

Protein Affinity Tag for Purification of Recombinant Proteins.”

Gleason presented a poster “Variable Appearance of Backbone C α -Deuteron Signals in Solid-State NMR Spectra of Designed Membrane-Spanning Peptides.”

Thurman presented a poster “Characterization of the FGF Receptor mutations Involved in Disease.”

Colin Heyes gave an invited talk at the 45th Midwest Regional ACS Meeting, Wichita, Kan., Oct. 27 to Oct. 30, “Connecting the Ensemble and Single-Molecule Optical Properties of Quantum Dots for their Use as Quantitative Fluorescence Probes.”

Matt McIntosh gave a talk at Hendrix College in October.

Ryan Tian attended the Smart Materials Research Conference hosted by the Arkansas Research Alliance at the Winthrop Rockefeller Institute in Petit Jean, Oct. 31-Nov. 2.

Nan Zheng presented “Development of Catalytic Methods for C-N Bond Formation,” at both Missouri State University Oct. 20 and at University of Central Arkansas Oct. 26.

Department Picnic

The annual department picnic returned to Agri Park earlier this fall. Last year the department rescheduled the picnic three times before cancelling the event because of heavy rainfall. This year the weather was mild but windy, making a game of volleyball difficult.



Lorraine Gawley spends time with Haven Adams, daughter of Paul Adams.



Julie Stenken reacts to a play during a game of volleyball.



Peter Pulay talks with Matthias Knust. Agnes Pulay is in the background.

Student News

Emerson Receives Forensic Grant

Graduate student **Beth Emerson** was named the 2011 recipient of the Jan Bashinski Criminalistics Graduate Thesis Grant by the Forensic Sciences Foundation.

In addition to a cash award, Emerson will receive funds to attend a future American Academy of Forensic Sciences (AAFS) meeting.

The award provides graduate students with financial assistance to complete their thesis or independent research project as required for a graduate degree in Criminalistics/Forensic Sciences.



Beth Emerson

Majors in the Band

The university bands are represented by graduate student **Brett Spahn** and majors **Blaire Hines**, **Rhys Moore**, **Kayla Parsons**, **Ettore Rastelli**, **Kyleigh Strickland** and **Ryan Trovillion**.

Home Notes



Rowan India Rains

Ryder Christopher Swann

Denise Greathouse was doubly blessed in November with the birth of her seventh and eighth grandchildren born just 10 days apart.

Granddaughter Rowan India Rains was born Nov. 3 to Greathouse's daughter Melissa Swann and her husband Roger Rains of Fayetteville. Baby Rowan weighed 7 pounds and 3 ounces.

Grandson Ryder Christopher Newman Swann was born Nov. 13 to Greathouse's son Joshua and his wife Erin Swann of Fort Collins, Colo. Baby Ryder weighed 7 pounds and 12 ounces.

Additionally, Greathouse has a photo exhibit at the Fayetteville Library Reading Room (2nd floor).

Staff Notes

Fields Joins Tech Staff

Shawn Fields has joined the department as a master scientific technician. He brings 20 years experience in manufacturing maintenance including jobs with Tyson Foods, Bekaert and Kennametal. This is his first time to work in academia.

Fields was born in Tulsa but has lived most of his life in Rogers. He has a B.A. in leadership and management from Harding University.

He has been married for 12 years to his wife Phyllis and has two sons, ages 19 and 11, and a daughter, age 7. The oldest attends Arkansas Tech University.

Aside from raising his children, he enjoys the outdoors — hiking and snowboarding. Look for Fields on the spring canoe trip.

He joins the ever-capable technical staff of **Marv Leister**, **Jerry Homesley** and **KZ Shein**, who are responsible for maintaining teaching and research labs.



Shawn Fields

Staff Honored for Years of Service

The following staff were recognized in October for complete years of service to the university.

30 years - **Janice Chapman**

20 years - **Liz Williams**

10 years - **Jennifer Sims**

Fastest Department Team

Department team members won the trophy for fastest department in the inaugural Down and Dirty 5K hosted by the crop, soils and environmental sciences department October 23 in Fayetteville.

Team members were faculty member **Joshua Sakon**, grad students **Becky Kerr** and **Christian Loeschel**, and undergraduates **Courtney Cagle**, **Grant Meredith** and **Daniel Vo**.

The trophy is available for viewing at the reception desk.

Quote for Contemplation

**Results! Why man,
I have gotten a lot of results.
I know several thousand
things that won't work.**

- Thomas Edison

Calendar of Events

November

01..... Department seminar
 01-12 Priority registration for spring 2011
 08..... Department seminar
 12..... Incomplete marks from the previous semester changed to failing
 12..... CUME
 15..... Department seminar
 24..... Fall break, no class, university is open
 25-26 Thanksgiving holiday - university closed
 29..... Department seminar series concludes

December

03..... CUME
 07..... Last day of fall classes
 07..... Last day to officially withdraw from all courses
 08..... Dead day, no classes
 08..... Department holiday potluck
 09-15 Final exams
 24-31 Holiday - university closed

January

12-24 Open registration and drop/add for new students
 17..... Martin Luther King Holiday, university closed
 17..... Last day to receive 100% cancellation of fees for an official withdrawal for spring 2011
 18..... First day of spring 2011 classes
 21..... CUME
 24..... Last day to add a full semester class or to register for spring 2011
 24..... Arthur Fry Lecture Series featuring Donna G. Blackmond
 31..... Last day to drop a full semester class without having the mark of "W"
 31..... Spring seminar series begins

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

Save the Date

The Arthur Fry Lecture Series presents Donna G. Blackmond of The Scripps Research Institute, Monday, Jan. 24.

Fall Break

There will be NO CLASSES at the University of Arkansas Wednesday, Nov. 24 but the university will be open.

The university will be closed for Thanksgiving Thursday, Nov. 25 and Friday, Nov. 26.

Annual Holiday Potluck

The department annual holiday potluck will be Wednesday, Dec. 8 (Dead Day) at noon in CHEM 105 and the administrative suite.

November Birthdays

07..... Ashley Ramsey
 07..... Bob Gawley
 08..... Kwangyul Moon
 09..... Marilyn Davis
 11..... Latisha Puckett
 12..... Ingrid Fritsch
 15..... Nicole Vanderbush
 18..... Dale Johnson
 22..... Daniel Eddings
 23..... David Paul
 24..... Erika Von Grote
 26..... Binitha Vijayakumari
 27..... Chris Rupar

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>

Fall hours (Aug. 23 - Dec. 15)

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

Exceptions to regular hours

Nov. 23-24 8 a.m. to 6 p.m.
 Nov. 25-28 CLOSED

Holiday hours (Dec. 16 - Jan. 2)

Dec. 16-17 8 a.m. to 5 p.m.
 Dec. 18-19 CLOSED
 Dec. 20-23 8 a.m. to 5 p.m.
 Dec. 24-Jan. 2 CLOSED

CUMES

Cumulative exams for graduate students will be given on the following Fridays.

- Fall 2010: Nov. 12 and Dec. 3
- Spring 2011: Jan. 21, Feb. 11, Mar. 11, Apr. 1 and Apr. 15