

News From Around the College

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...BIOLOGICAL SCIENCE...

Dr. Paul Stapp, Milena Holmgren and colleagues published a review paper in the March issue of *Frontiers in Ecology and the Environment*, entitled "Extreme climatic events shape arid and semiarid ecosystems".

The following paper, co-authored by **Dr. Paul Stapp** and postdoctoral associate Dan Salkeld, has also been recently accepted for publication:

Salkeld, D. J., R. J. Eisen, M. F. Antolin, **P. Stapp** and L. Eisen. Host usage and seasonal activity patterns of *Ixodes kingi* and *I. sculptus* (Acari: Ixodidae) in a Colorado prairie landscape, with a summary of published North American host records. *Journal of Vector Ecology*.

...CHEMISTRY & BIOCHEMISTRY ...

In January, **Dr. Katherine Kantardjieff** officially became the Vice Chair of the United States National Committee for Crystallography (USNC/Cr), elected for a three-year term. The Committee furthers the interests of the U.S. crystallography community in International Union of Crystallography (IUCr) and promotes the intellectual vigor and diversity of the crystallographic community.

...GEOLOGICAL SCIENCES ...

Dr. Jeff Knott recently published a paper in the *Journal of Geoscience Education*: McConnell, D. A., Steer, D. N., Owens, K. D., **Knott, J. R.**, Van Horn, S., Borowski, W., Dick, J., Foos, A., Konigsberg, A., Malone, M., McGrew, H., Greer, L., Heaney, P. J. (2006). Using Conceptests to Assess and Improve Student Conceptual Understanding in Introductory Geoscience Courses: *Journal of Geoscience Education*, v. 54, n. 1, p. 61-68.

Of special note, **Dr. Kelly Bovard**, a part-time instructor, published an article recently. The citation is as follows:

Owen, L. A., Caffee, M. W., **Bovard, K. R.**, Finkel, R. C., Sharma, M. C. (2006). Terrestrial cosmogenic nuclide surface exposure dating of the oldest glacial successions in the Himalayan orogen: Ladakh Range, Northern India: *Geological Society of America Bulletin*, v. 118, n. 3, p. 383-392.

...MATHEMATICS...

Dr. Charles H. Lee received a Certificate of Appreciation from the IEEE Conference General Chair in recognition of his outstanding service and support as Track Chair to the IEEE 62nd Semi-Annual Vehicular Technology Conference at Dallas, TX.

...PHYSICS...

"The four A's", a full page review of Patricia Albjerg Graham's book "Schooling America - How the public schools meet the nation's changing Needs" by **Dr. Mark Shapiro** was published in the February 17, 2006 edition of *The Times Literary Supplement*. The Times Literary Supplement is published by *The Times of London*.

HACU SCHOLARSHIP PROGRAM

General Criteria: Students must demonstrate financial need, meet the specified criteria specified for the program to which they are applying (see description below), and be attending a HACU-member institution at the time scholarship awards are made.

How to apply: Students can apply online at <https://scholarships.hacu.net>

Deadline: **May 19, 2006** (including all supporting documentation)

Award: Will be given in August 2006.

Bureau of Land Management Award (\$1,000)

Criteria: Full-time undergraduate students at 4-year institutions with declared majors in natural resources – or their equivalent majors/curricula – degree program. Students must possess a **minimum cumulative GPA of 3.2** and have an **interest in natural resources management**.

CLASE/Coors Light Academic Success in Education Award (\$1,000)

Criteria: Full-time graduate students in **any** Master, J.D., M.D., or Ph.D. program. Students must possess a **minimum cumulative GPA of 3.0**.

Time Warner Scholarship Award (\$2,000)

Criteria: Full-time undergraduate students at 4-year institutions who have completed at least 12 undergraduate units of **any major** with an interest in the entertainment, news, media or telecommunications industries. Students must possess a **minimum cumulative GPA of 3.0**. Scholars may be considered for paid summer internships at Time Warner through the Time Warner “STARS” program.

Questions regarding HACU Scholarship Program should be directed to:

Jonathan Santeliz, HACU Collegiate Programs Manager

Phone: 202.467.0893 or E-mail: scholarship@hacu.net

For more details, please visit: <https://scholarships.hacu.net>.

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***** SAVE THE DATE *****

**BRYDEN DISTINGUISHED LECTURE IN
CRYSTALLOGRAPHIC SCIENCE**

**Thursday, April 27, 2006 in Pollak Library 130 : 4-5 PM
Meet the speaker- Reception will follow**

The Bryden Distinguished Lecture Series is named for the founding member of the Department of Chemistry and Biochemistry at CSU Fullerton, **Dr. John Bryden**, who was a crystallographer. Each year, the W.M. Keck Foundation Center for Molecular Structure, CMoLS, hosts a distinguished lecturer whose research involves using single crystal diffraction methods (x-ray, electron, neutron) to study the structure of matter at atomic or near atomic resolution and to understand the chemical and physical implications for the arrangements of atoms and molecules in matter.



This year's Bryden Distinguished Lecturer is Professor Robert Bau in the Department of Chemistry at the University of Southern California. Professor Bau researches neutron diffraction of metal hydride complexes and metal-hydrogen bonding. His laboratory currently studies anti-arthritis gold/thiolate complexes, such as Solganol and Allochrysin, and hopes to determine the structures of other important drugs such as the anti-tumor compound bleomycin.

His laboratory has also investigated the structure of rubredoxin, a small, iron-containing protein from the hyperthermophile *Pyrococcus furiosus*. Bau hopes to understand the remarkable thermal stability of this microorganism, which can survive at temperatures above 100°C.

Professor Bau is President of the American Crystallographic Association, and he is leading the design and development of facilities and instruments at the new Spallation Neutron Source (SNS) at Oakridge National Laboratory in Tennessee.

CHEMISTRY & BIOCHEMISTRY CLUB

**** The Chemistry & Biochemistry Club Meeting ****

Date: **March 16, 2006**
Time: **5:00 PM - 6:30 PM**
Location: **MH 487**
Guest Speaker: **Monica Aviedo**

Monica Aviedo is a Physician's Assistant in Pediatrics St. Mary's Medical Center. At the meeting, Ms. Aviedo will be talking about her experience in the Peace Core and also about what is like being a Physician's Assistant.

**NSM
NEWSLETTER**

MATHEMATICAL CHALLENGES OF GRAVITATIONAL WAVE DETECTION

(Abstract for a Math Colloquium on Wednesday, March 22 at 2:30 PM in MH 476)

Speaker: Dr. Alexander Alekseenko (Cal State Northridge)

Gravitational astronomy, yesterday existing only as a sci-fiction dream, is getting substantial as scientists begin to understand the mathematical language of gravity. Predictions of Einstein's Theory of Relativity on existence of gravitational waves and the nature of gravitation are now put to test using the most recent technologies to guarantee the necessary accuracy in measurements. In various places around the world (with the two largest in the US), the Laser Interferometer Gravitational wave Observatories, or LIGOs, act as super sensitive rulers in attempt to detect perturbations in gravitational field caused by the dramatic processes of cosmos like inspiraling and coalescence of two black holes, swallowing of a neutron star by a black hole, or a starquake. In 2015, the first space based detector, Laser Interferometer Space Antenna (or LISA), will begin listening to the sounds of the Universe.

A tremendous theoretical challenge that both physicists and mathematicians face today is to learn how to interpret the data collected by the gravitational wave detectors. Joint efforts worldwide are directed at the development of a reliable numerical simulation of cosmic processes. In spite of the very big progress over the last two decades, a reliable waveform corresponding to a collision of two black holes is still desired.

The talk will address several most recognized issues that impede the construction of a reliable numerical method for computing the Einstein equations. There will be a brief introduction to numerical relativity and an outline of several directions in the PDEs theory that are being actively researched in connection to the Einstein equations.

RONALD E. MCNAIR POST-BACCALAUREATE ACHIEVEMENT PROGRAM @ CSUF

The **CSUF McNair Scholars Program** is accepting applications for the 2006-2007 cohort of students. This program provides with opportunities to define goals, engage in research, as well as develop skills and student-faculty mentor relationships critical to success at the doctoral level.

The program is seeking **undergraduate sophomores, juniors, and (in some cases) seniors who plan to pursue graduate, preferably doctoral, degrees.**

Some of the benefits of the program:

Receive a \$2,800 stipend for participation in a research project * Work with faculty mentors * Attend workshops * Travel to attend scholarly conferences across the country * Participate in panel discussions led by eminent scholars and faculty

Deadline: March 26, 2006

For more information, visit <http://www.fullerton.edu/mcnair>

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NEWSLETTER

RECIPE FOR ENHANCING LEADERSHIP SKILLS

Ingredients:

Cal State Fullerton students interested in gaining or enhancing leadership skills.

Directions:

1. Attend the University Leadership Conference 2006
 2. Mix ingredients with inspirational and motivational speakers
 3. Add fun leadership training workshops and mix with an open mind
 4. Bake for one day
- Serve on Saturday, March 18, 2006 at the Cal State Fullerton campus

Recipe good for:

- A leadership certificate;
- Increasing your self-confidence;
- Networking and team building;
- Enhancing your resume;
- Giving you a competitive edge in the job market;
- Increasing your personal and professional potential.

University Leadership Conference
Leadership: Everyone, Everyday, Everywhere

Saturday, March 18, 2006; 9:00 am to 5:00pm
Titan Student Union, Cal State Fullerton
714 . 278 . 3211

For more information, check out the website for conference update and news:
<http://www.fullerton.edu/deanofstudents/lmdp/LMDP.htm>

2006 SOUTHERN CALIFORNIA FORUM FOR DIVERSITY IN GRADUATE EDUCATION

This year's forum will be held in the University of Southern California,
Saturday, April 22, 2006 from 8:00 AM - 3:30 PM.

The Forum is designed to acquaint students from underrepresented groups with the academic and career opportunities associated with advanced study in a wide range of disciplines.

Highlights:

- Representatives from over 100 of the nation's leading graduate schools
- Free access to the Princeton Review's on-line GRE prep course (a \$500 value)
- Complimentary lunch and transportation from CSU Fullerton
- Informational workshops (How to Write a Winning Statement of Purpose, How to Select the Right Graduate School, etc.)

Attendance is by **Invitation only!**

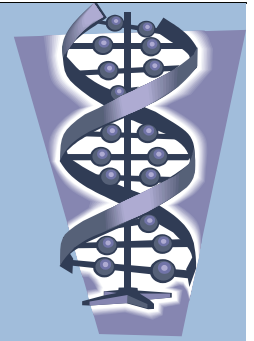
Student Selection Criteria:

* Sophomore, junior, or senior class standing or candidacy for a master's degree * GPA 3.0 and above * Promise of success in graduate work * Faculty recommendations * Membership in a group underrepresented in higher education.

Register at: http://www.ucop.edu/diversityforum/index.php?op=onsite_reg
For more information, contact: **Gerald Bryant** (McNair Director) @ 714.278.7364

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Career Success for Science & Math Majors



Featured Speaker: Lisa Winter

Orange County Sheriff's Crime Lab

"Forensic Science—Inside the Crime Lab"

Presentation on Blood Alcohol, Toxicology, DNA, Trace Evidence,
Firearms, Controlled Substances, and Questioned Documents.

10:00 am to 11:00 am

Featured Speaker: Lisa Winter: TSU Little

11:00 am to 12:00 pm

Breakout Session I: Ontiveros ABC

A: Environmental Sciences

B: Biotechnology/Pharmaceuticals

C: Education, Government, Public Sector

12:00 pm to 1:00 pm

Lunch in Gabrielino: Students and Employers

1:00 pm to 2:00

Breakout Session II: Ontiveros ABC

A: Environmental Sciences

B: Biotechnology/Pharmaceuticals

C: Education, Government, Public Sector

**Limited Seating!!!
Register by March 3rd**

Date: March 8, 2006

Time: 10:00 am to 2:00 pm

To register please visit:

<http://nsm.fullerton.edu/careerday.asp>

SEMINARS

BIOLOGICAL SCIENCE

Wednesdays at 4:00 PM in MH 513

March 1, 2006

Speaker: Dr. John Avise (School of Biological Science, UC Irvine)
Host: Dr. Doug Eernisse /SCERP
Topic: Microsatellite assessments of mating systems and reproductive behaviors in fishes.

March 8, 2006

Speaker: Dr. Stephen Kendall (City of Hope)
Host: Dr. Bob Koch
Topic: Neural stem chemotropism and tumor targeting.

March 15, 2006

Speaker: Dr. Claus Holzapfel (Rutgers University)
Host: Dr. Jochen Schenk
Topic: On cooperation, good neighbors and playing games: A plant's perspective.

March 22, 2006

Speaker: Dr. Andrew Roberts (Department of Evolution, Ecology and Organismal Biology, The Ohio State University Newark)
Host: Dr. Sean Walker
Topic: TBA

CHEMISTRY & BIOCHEMISTRY

*Thursdays at 4:00 PM in MH 468
Refreshments at 3:45 PM*

March 2, 2006

Speaker: Dr. Sergey Nizkorodov (Department of Chemistry, UC Irvine)
Topic: Chemistry of Secondary Organic Aerosol Particles in Indoor and Outdoor Air.

March 9, 2006: TBA

March 16, 2006

Speaker: Michael Brown (Department of Chemistry, University of Arizona)
Topic: Solid-State NMR Spectroscopy of Biomolecules

March 23, 2006

Speaker: Ms. Elisha Ho (Graduate Student Department of Chemistry & Biochemistry CSUF)
Topic: TBA

GEOLOGICAL SCIENCES

*Wednesdays at 4:30 PM in MH 327
Refreshments at 4:15 PM*

March 1, 2006

Speaker: Mohamed Chlieh (Cal Tech)
Topic: Geodetic Modeling of the Great 2004 Sumatra and 2005 Nias Earthquakes.

March 8, 2006

Speaker: Jonathan Nourse (Cal Poly Pomona)
Topic: Proterozoic Basement at the Truncated SW Margin of Laurentia: Implications for Rodinia Reconstructions, Megasears, Reactivated Faults, and Gold Mining.

March 15, 2006

Speaker: Jerry D. Higgins (Colorado School of Mines)
Topic: Site Characterization for Slope Stability Assessment.

March 22, 2006

Speaker: David Chapman (University of Utah)
Topic: TBA—Climate Change

MATHEMATICS

*Wednesdays at 2:30 PM in MH 476
Refreshments at 3:30 PM in MH 484*

March 22, 2006

Speaker: Dr. Alexander Alekseenko (Cal State Northridge)
Topic: Mathematical Challenges of Gravitational Wave Detection (see description on page 4)



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