



## Biochemistry and Molecular Biology

# NOTES



Volume 14, No.8

November 2001

## Congratulations!

**Claire Walczak** recently received a grant from the Leukemia and Lymphoma Society in support of her research "Molecular Analysis of Kinetochores-Microtubule Interactions in Cells"

*and*

another grant from the AHA Midwest in support of her research in "Mechanistic Analysis of the Microtubule-Destabilizing Kinesin, XKCM1".

**Rose Fife** has been appointed as associate editor of the *Journal of Laboratory and Clinical Medicine*. She previously served on the publication's editorial advisory board. In her new role, she will be involved in the peer review process of assessing articles for publication in the monthly journal published by the Central Society for Clinical Research.



**Rose Fife** recently received a grant from the NIH in support of her research in "Role of Nitric Oxide in the Progression of Murine Mammary Cancers."

**Jim Walsh** was awarded a grant from the Indiana Center for Vascular Biology and Medicine for "Calcium Regulation of Diacylglycerol Signaling in Vascular Smooth Muscle Cells".

**Suk-Hee Lee** received a grant from the United States Army under the grant titled: US Army Med Ovarian Cancer. His project title is "DNA Repair and Cell Cycle Therapeutic Targets for Ovarian Cancer". Total Project Period: 10/1/01 - 9/31/02.

We also have two faculty members working on the new Army Med Ovarian Cancer project under Dr. Jean Hurteau. They are **Mark Goebel** and **Maureen Harrington**.

**Mu Wang** accepted the position of Scientific Director of the Proteomics Core Facility of the Biochemistry Biotechnology Facility. Congratulations, Mu!

## Important Dates

- 11/1 NIH Competing contin.
- 11/22 THANKSGIVING
- 12/11 Finals begin
- 12/12 CHRISTMAS
- 1/1/02 HAPPY NEW YEAR!
- 1/7 Classes Begin
- 1/15 American Heart Assn.
- 1/22 American Heart -Midwest
- 2/1 American Diabetes Assn.
- 3/1 American Cancer Society

## Dean's Office Deadlines -Nov

- 11/21 NIH Committed Continu-  
tations

## Dean's Office Deadlines - Dec

- 12/14 NIH Committed Con-  
tinuations

## November Seminars

### Biochemistry Seminars Mondays 4 pm, MS 326

**11/5 Dr. Linda Van Aelst**, Associate Professor, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York. *AF6/Canoe functions as a Rap1 effector in epithelial morphogenesis.*

**11/6 B26, 11:00 a.m.; Dr. C. Nicklaus Steussy**, Graduate Student, Biochemistry and Molecular Biology, IUSM, Indianapolis, IN. *A Structure/Function Study of Pyruvate Dehydrogenase Kinase.*

**11/12 Dr. Cheong-Hee Chang**, Associate Professor, Department of Microbiology and Immunology, Member, Walther Oncology Center, IUSM, Indianapolis, IN. *Function and regulation of the MHC Class II transactivator.*

**11/19 12:00 Dr. Gloria Borgstahl**, Assistant Professor, Department of Chemistry, University of Toledo, Toledo, OH. *Structural Studies on the Repair of Double-Stranded DNA Breaks*

**11/19 Dr. Stephen L. Johnson**, Professor, Genetics, Washington University Medical School, St. Louis, MO. *c-kit dependent and independent mechanisms of zebrafish melanocyte development.*

**11/26 Dr. Michael J. Bannon**, Candidate for Chair of the Department of Pharmacology/Toxicology. *So how does DAT work? Transcriptional Regulation of the Human Dopamine Transporter Gene.*

### Biochemistry Student Seminars Wednesdays, 12 Noon, MS 311

**11/7 Yong Luo**

**11/14 David Chang**

**11/21 Suzanne Hart**

**11/28 Hye-Sook Kwon**

*Exerpts from Robert Martin's remarks to Staff Council at Sept meeting regarding construction on campus:*

Administration-Classroom and Computer Technology Complex building will be ready for occupancy by November, 2003.

Herron School of Art will be in the old law building by Fall 2003.

Medical Center: Research Building II on schedule; occupancy estimated by December 2002; and another research facility between II and I will be built. Pylons constructed to support the Methodist Hospital/IU Medical Center "People Mover" are evident along University Boulevard ending at Walnut Street in the median across from the Lilly Medical Library; probably a year and a half before operational. There will be overhead walkways connecting the terminal with medical campus buildings. The "People Mover" can move people between Methodist and the IU Medical Center in 2.5 minutes.

Student Housing: Warthin Apartments demolished and Phase I construction is beginning; there will be full occupancy (750 students) by January 2003. There are 250 students in Ball Residence Hall. Phase II program will begin upon completion of Phase I.

## Recent Publications

Sloop, K.W., Dwyer, C., and **Rhodes, S.J.** (2001). An isoform-specific inhibitory domain regulates the LHX3 LIM homeodomain factor holoprotein and the production of a functional alternate translation form. *J. Biol. Chem.* **276**: 36311-36319.

Blazer-Yost, B.L., Butterworth, M., Hartman, A., Parker, G.E., Faletti, C., Els, W.J. and **Rhodes, S.J.** (2001). Characterization and imaging of A6 epithelial cell clones expressing fluorescently-labeled ENaC subunits. *Am. J. Physiol. Cell Physiol.* **281**: C624-C632.

Bridwell, J.L., Price, J.R., Parker, G.E., McCutchan Schiller, A., Sloop, K.W. and **Rhodes, S.J.** (2001). Role of the LIM domains in DNA recognition by the Lhx3 neuroendocrine transcription factor. *Gene* **277**: 239-250.

Sloop, K.W., Parker, G.E., Hanna, K.R., Wright, H.A., and **Rhodes, S.J.** (2001). LHX3 transcription factor mutations associated with combined pituitary hormone deficiency impair the activation of pituitary target genes. *Gene* **265**: 61-69.

Liu, C, Xu, Z, **Gupta, D**, and Dziarski, R. 2001. Peptidoglycan recognition proteins: a novel family of four human innate immunity pattern recognition molecules. *J. Biol. Chem.*, **276**:34686-34694 (featured on the cover of Journal of Biological Chemistry).



## Other Seminars of Interest

**11/1 4:00 p.m.** *Understanding Paramyxovirus Fusion Machines.* **Robert A. Lamb, Ph.D.**, John Evans Professor of Molecular and Cellular Biology and Investigator, Howard Hughes Medical Institute, Northwestern University; Evanston, IL. VanNuys Medical Science 326.

**11/7 12:00 noon** *The Perspective of a Hindu Physician. Spirituality in Medicine Discussion Series.* **Dr. A.B. Agarwal**, Geriatric Medicine – Interviewed by **W. Marshall Anderson, Ph.D.**, Professor of Biochemistry/Molecular Biology; Northwest Center for Medical Education. This seminar will be broadcast by Polycom to the Ruth Lilly Medical Library 318.

**11/7 12:00 noon** *Heat Shock Protein 20 Phosphorylation in Cyclic Nucleotide-Dependent Smooth Muscle Relaxation.* **Christopher M. Rembold, M.D.**, Depts. of Cardiology and Physiology, University of Virginia Health Sciences Center; Charlottesville, VA. VanNuys Medical Science 326.



**11/7 4:00 p.m.** *Molecular Genetics of Osteosarcoma and Related Disease.* **Marc Hansen, Ph.D.**, Professor of Medicine, Genetics and Developmental Biology, Center for Molecular Medicine, University of Connecticut Health Center; Farmington, CT. Cancer Research Inst. [R4] Auditorium 101.

**11/8 12:00 noon** *Alcoholism and Serotonergic Adaptation: In Vivo Microdialysis Studies.* **Richard Thielen, Ph.D.**, Dept. of Psychiatry, IUSM. Institute for Psychiatric Research 115.

**11/18 4:00 p.m.** *Configuring an Active Mu Transpososome with an Enhancer.* **Rasika M. Harshey, Ph.D.**, Section of Molecular Genetics and Microbiology, University of Texas at Austin; Austin, TX. VanNuys Medical Science 326.

**11/12 11:45 a.m.** *SHOX-ing News about Turner Syndrome and Related Growth Disorders.* Endocrine Research Seminar. **Charmian Quigley, M.D.**, Clinical Research Physician, Eli Lilly and Company; Indianapolis. Riley Outpatient Center [ROC], Lower Level, Conference Rooms A/B.

**11/14 4:00 p.m.** *Mitochondrial DNA Repair: A Critical Player in Cellular Defense Against Genotoxic Stressors.* **Susan Parson LeDoux, Ph.D.**, Dept. of Structural and Cellular Biology, University of South Alabama; Mobile, AL. Cancer Research Institute [R4] Auditorium 101.

**11/15 4:00 p.m.** *Co-Opting the Host Actin Cytoskeleton by Salmonella to Promote Bacterial Entry.* **Daoguo Zhou, Ph.D.**, Dept. of Biological Sciences, Purdue University; West Lafayette, IN. VanNuys Medical Science 326.

**11/28 12:00 noon** *Palladin, a Novel Protein with a Key Role in Actin Organization.* **Carol Otey, Ph.D.**, Dept. of Cell/Molecular Physiology, University of North Carolina at Chapel Hill; Chapel Hill, NC. VanNuys Medical Science 326.

**11/28 4:00 p.m.** *Analytical Glycobiology: Elucidating the Roles of Glycans in Health and Disease.* **Milos N. Novotny, Ph.D.**, Distinguished Professor and Lilly Chemistry Alumni Chair and Director, Institute of Pheromone Research, Indiana University; Bloomington. Cancer Research Institute [R4] Auditorium 101.

**11/29 4:00 p.m.** *Regulation and Crosstalk Between Ras Family GTPases Via a Growing Number of Guanine Nucleotide Exchange Factors (GEFs).* **Lawrence A. Quilliam, Ph.D.**, Dept. of Biochemistry/Molecular Biology, IUSM. VanNuys Medical Science 326.



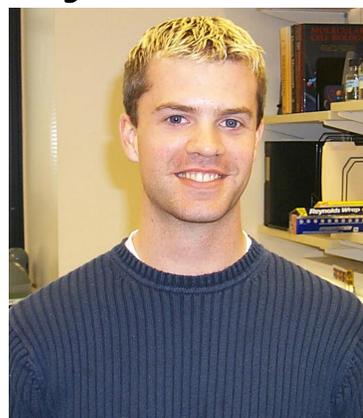
## New Faces in Biochemistry



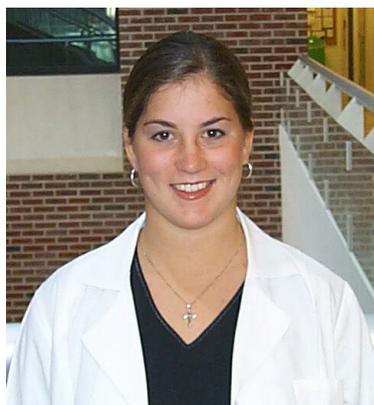
**Junyu Li** - Postdoctoral Fellow in Frank Witzmann's lab.



**Ross Cocklin** is a Research Technician in John Hawes' Lab.



**Nate Kendrick** is a Research Technician in Debbie Thurmond's Lab.



**Heather Coppage** - Research Technician in Frank Witzmann's lab.



**Janet Mackins** is a Research Technician in Maureen Harrington's Lab.



**Xiaoling Xuei** is an Associate Scientist in the Center for Medical Genomics.



**Dave Vessell** - Research Technician in Frank Witzmann's lab.



**Emily Decker** is a Research Technician in John Hawes' Lab.



**Congrong Wang** is a Postdoctoral Fellow in Anna DePaoli-Roach's Lab.

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## Another Successful Biochem Retreat!

The 2001 Biochem Retreat held at the Indianapolis Art Center on Saturday, Oct. 6 was a success due to everyone's participation. Over 90 people were on hand for 12 excellent research presentations by various Biochemistry faculty. Posters were plentiful across numerous locations at the facility.

**Kirk Staschke** of Dr. Wek's lab won the Jack Davis Award for best student seminar in 2000-01, and **Hui Zong**, a graduate of Dr. Quilliam's lab, won the Peggy Gibson Award for best paper by a student in 2000-01. The students voted **Bob Harris** as the winner of the new Outstanding Mentor Award.

Also new this year were Poster Awards; **Jill Paterson** of David Daleke's lab took home first place and **Nic Steussy** of Jean Hamilton's lab snagged second place. Congratulations to all!

Many thanks to everyone who worked so hard on making this a superb event. Our thanks to **Paula Ladd** and **Brian Gibbons** for serving as moderators in the research presentations; to **Heather Larson**, to **all of the Biochem students**, and to the **office staff** for their help with transporting materials and refreshments, and set up and clean up. You deserve a round of applause!



## Hepatitis B and the Hepatitis Vaccine

What is Hepatitis B? Should you be vaccinated against it? It's a liver infection caused by the hepatitis B virus, resulting in swelling and tenderness of the liver. Symptoms include fatigue, fever, muscle aches, nausea, vomiting, loss of appetite, stomach pain, and diarrhea; sometimes the skin and whites of the eye appear yellow (jaundice).

It's transmitted by blood and body fluids. If you come in contact with these fluids in the course of your work, you may be

eligible to receive a hepatitis B vaccine from Occupational and Student Health Services in Coleman Hall, Room 101. Their hours of operation are 7:30 a.m. - 5 p.m. on Mon, Tues, Wed, and Fri, and 9 - 5 on Thursdays. No appointment is necessary.

The vaccine is given in three doses. After the initial dose, you will receive a second dose one month later, and the third dose six months after the initial one. Approximately four to six

weeks after the cycle is completed, you should return to have a blood sample drawn to check the effectiveness of the vaccine.

Contact your supervisor if you need the vaccine due to your work environment. If you'd like to receive the vaccine for your own personal health, Student Health will provide the vaccine to you as a private paying patient. For further information about the vaccine, please contact Occupational and Student Health Services at 4-8214.

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