



## Biochemistry and Molecular Biology

# NOTES



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May 2002

### Congratulations!

Congratulations to **Bart** and **Iris Pederson** on the birth of their son. **Samuel Gary Pederson** was born on Wednesday, April 24, 2002 at 8:00 a.m. He weighed 7 pounds, 7 ounces and is 20 ¾" long. Congratulations to little Molly, too. She is now a big sister!

**Lawrence Quilliam** and Ann Roman were awarded a Cancer Center Pilot Project entitled, "Does the GTPase Rap1 mediate human papilloma virus-induced transformations?"

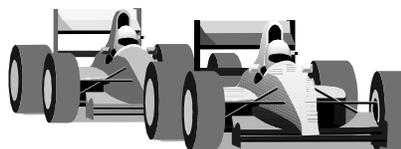
NIH recently awarded **Simon Rhodes** a 5-year, \$1.15 million grant to study how LHX3 proteins impact the development of hormone-secreting cells in the pituitary gland. This study is aimed at better understanding hormone deficiencies that result in stunted growth in children. His research could also provide more insight into thyroid, metabolic, and reproductive diseases that are often found in children with growth hormone deficiency.

#### American Heart Association announces the Midwest Affiliate Research Funding Opportunities

For pre-doc and post-doc fellowships, Grant-in-Aid, and Scientist Development Grants, the application due dates are July 17, 2002 and January 14, 2003. Electronic submission of applications is required. For information and application forms visit their website at [www.americanheart.org/research](http://www.americanheart.org/research). For further information contact the AHA Division of Research Administration, (214) 706-1457, or email [affil@heart.org](mailto:affil@heart.org).

Four Biochem students participated in the 2002 Sigma Xi Graduate Student Research competition held on April 15 and 16 at the Daly Center.

**Brian Gibbons** of Tom Hurley's group presented "The structure of glycogenin". **Suzanne Hart** of Dave Skalnik's lab group presented "Treatment of hematopoietic cell lines with Morpholino oligonucleotides directed against CpG binding protein mRNA leads to cell death". **Boli Huang** of Bob Harris' lab presented a talk on "Regulation of pyruvate dehydrogenase activity through altered expression of its kinase and phosphatase". **Paula Ladd**, also of Dave Skalnik's lab, presented a talk on "Identification and characterization of Rac2 genomic elements that direct hematopoietic cell-specific expression".



# May Seminars

## *Biochemistry Seminars Mondays 4 pm, MS 326*

**5/6 Dr. Daniel J. Klionsky**, Professor, Department of Molecular, Cellular and Developmental Biology, and Department of Biological Chemistry, University of Michigan, Ann Arbor, MI. “**Autophagy as a Regulated Pathway of Cellular Degradation**”

**5/13 Dr. Matthew Sachs**, Associate Professor, Department of Biochemistry and Molecular Biology, Oregon Health and Science University, Beaverton, OR. “**Translational Control by Upstream Open Reading Frames in mRNA**”

## *Center for Diabetes Research Seminars, Tuesdays 4 pm, MS 122A*

**5/7 Dr. James P. Walsh**, Associate Professor of Medicine, Biochemistry and Molecular Biology, IUSM, Indianapolis, IN. “**Lipid Signaling in Diabetic Vascular Disease**”

## *Other Seminars of Interest*

**5/8 12:00 noon** Ethics and Science as Jointly Necessary in the Human Genome Project: What is the Bioethical Equivalent of Proteomics? **Eric M. Meslin, Ph.D.**, Director, IU Center for Bioethics, IUSM. **VanNuys Med. Science B26.**

**5/8 4:00 p.m.** Progress Towards a Cell-Mediated Gene Targeting Approach in Zebrafish. **Paul Collodi, M.D.**, Purdue University, West Lafayette, IN. **Cancer Research Institute [R4] Auditorium 101.**

**5/9 4:00 p.m.** Modular Properties of Pituitary Developmental Transcription Factors: Genes to Proteins. **Simon J. Rhodes, Ph.D.**, Dept. of Biology; IUPUI. **VanNuys Medical Science 326.**

**5/15 4:00 p.m.** Zebrafish E-Cadherin Controls Epiboly and Gastrulation Cell Movements. **James Marrs, Ph.D.**, Dept. of Medicine, IUSM. **Cancer Research Institute [R4] Auditorium 101.**

**5/17 12:00 noon** Host Factors and AIDS Pathogenesis. **Ghalib Alkhatib, Ph.D.**, Dept. of Microbiology/Immunology, IUSM. **VanNuys Medical Science 311 A/B.**

**5/22 4:00 p.m.** Regulation of Hematopoiesis and Cardiogenesis

by the RA-BMP-GATA Pathway. **Todd R. Evans, Ph.D.**, Director, Sue Golding Graduate Division, Albert Einstein College of Medicine; Bronx, NY. **Cancer Research Institute [R4] Auditorium 101.**

**5/23 4:00 p.m.** Differential MHCII-Mediated Presentation of Rheumatoid Arthritis Autoantigens by Human Dendritic Cells and Macrophages. **Susan Kovats, Ph.D.**, Asst. Professor, Div. of Immunology, Beckman Research Institute of the City of Hope; Duarte, CA. **VanNuys Medical Science 326.**

**5/29 4:00 p.m.** Mitosis, The P2P-R Protein and Cancer Prevention. **Robert Scott, Ph.D.**, University Distinguished Professor, Gerwin-Pathology Cancer Research Professor, University of Tennessee Health Science Center College of Medicine; Memphis, TN. **Cancer Research Institute [R4] Auditorium 101.**

**5/30 4:00 p.m.** Regulated Expression of Antibody Genes. **Philip W. Tucker, Ph.D.**, Marie Betzner Morrow Centennial Chair, School of Biological Sciences, Institute for Cellular and Molecular Biology, Molecular Genetics and Microbiology, University of Texas at Austin; Austin, TX. **VanNuys Medical Science 326.**

## New Faces in Biochemistry



**Elizabeth Ingle** is a Research Technician in the lab of Judy White



**Huma Soomro** is a work study student working in the lab of Dr. Jayaram



**Chunxiao Zhu** is a lab assistant in the lab of Matt Grow



**Xiang Sun** is a Lab Assistant in the lab of Ron Wek

The Department welcomes **C. Max Schmidt**, who received his M.D. from the University of Chicago in 1992 and his Ph.D. in Physiology & Biophysics from Georgetown University in 1998. He has been appointed Assistant Professor in the Departments of Surgery and Biochemistry & Molecular Biology. Previously on the faculty of Johns Hopkins University, his primary research interests are in liver and pancreatic cancer. His office is Cancer Research Institute (R4) Rm. 039; telephone 278-3324; email is [maxschmi@iupui.edu](mailto:maxschmi@iupui.edu).



### **Ruth Lilly Medical Library offers database-searching classes**

The Ruth Lilly Medical Library offers small group instruction to IUPUI faculty, staff or students in the following areas, by appointment only:

- How to access medical online databases (both on and off-campus)
  - Searching library databases, including full-text online articles and books
  - Searching medical specialty resources
  - Searching nursing or allied health resources
  - Searching for consumer health materials
  - Searching and analyzing Internet medical information
  - Locating materials and utilizing other services at the Ruth Lilly Medical Library.
- Classes typically last for one hour and may be done at the library or elsewhere on campus. Classes can be customized to concentrate on specific topics, and can be set up as a demon-

stration and tour, or a hands-on class at the library. Hands-on library classes are limited to 15 participants per session.

For more information, or to schedule a class, contact Elaine Skopelja at 274-8358, or [eskopelj@iupui.edu](mailto:eskopelj@iupui.edu).

### **Important Dates**

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| <b>5/12</b> | <b>Commencement</b>  |
| <b>5/23</b> | <b>NIH Research grants, Program project/center grants, committed continuations</b>           |
| 6/7         | NIH Interactive Research Project Grants  |
| 6/19        | US Army Breast Cancer Research Program   |
| 6/20        | NIH Competing Continuation, supplemental and revised grants                                  |
| 8/21        | Classes Begin  |
| 9/2         | LABOR DAY  |
| 9/15        | NIH New Research, FIRST and Career Development Awards, All Program Project and Center Grants |

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# Recent Publications

**Jayaram HN, Yalowitz JA, Arguello F, Greene Jr JF.** Toxicity and efficacy of benzamide riboside in cancer chemotherapy models. *Curr Med Chem*, **9(7)**:787-92, 2002.

**Yalowitz JA, Jayaram HN.** Modulation of Cytotoxicity of Benzamide Riboside by Expression of NMN Adenyltransferase. *Curr Med Chem*, **9(7)**:749-58, 2002.

Novotny L, Rauko P, **Yalowitz JA**, Szekeres T. Antitumor activity of benzamide riboside in vitro and in vivo. *Curr Med Chem*, **9(7)**:773-9, 2002.

Gharehbaghi K, Grunberger W, **Jayaram HN.** Studies on the Mechanism of Action of Benzamide Riboside: A Novel Inhibitor of IMP Dehydrogenase. *Curr Med Chem*, **9(7)**:743-8, 2002.

Pankiewicz KW, Watanabe KA, Lesiak-Watanabe K, Goldstein BM, **Jayaram HN.** The Chemistry of Nicotinamide Adenine Dinucleotide (NAD) Analogues Containing C-Nucleosides Related to Nicotinamide Riboside. *Curr Med Chem*, **9(7)**:733-41, 2002.

**Yalowitz JA**, Pankiewicz K, Patterson SE, **Jayaram HN.** Cytotoxicity and cellular differentiation activity of methylenebis(phosphonate) analogs of tiazofurin and mycophenolic acid adenine dinucleotide in human cancer cell lines. *Cancer Lett*, **181(1)**:31-8, 2002.

**Roach, P. J.** (2002) Glycogen and its metabolism. *Current Molecular Medicine* **2**: 101-120.

Grusch M, Polgar D, Gfatter S, Leuhuber K, Huettenbrenner S, Leisser C, Fuhrmann G, Kassie F, Steinkellner H, Smid K, Peters GJ, **Jayaram HN**, Klepal W, Szekeres T, Knasmuller S, Krupitza G. Maintenance of ATP favours apoptosis over necrosis triggered by benzamide riboside. *Cell Death Differ*, **9(2)**:169-78, 2002.

**Wilson, W. A., Wang, Z., and Roach, P. J.** (2002) Analysis of respiratory mutants reveals new aspects of the control of glycogen accumulation by the cyclin-dependent protein kinase Pho85p. *FEBS Lett.* **515**: 104-108

**Wilson, W. A., Wang, Z. and Roach, P. J.** (2002) Systematic identification of the genes affecting glycogen storage in the yeast *Saccharomyces cerevisiae*: implication of the vacuole as a determinant of glycogen level. *Molecular and Cellular Proteomics* **1**: 234-242

