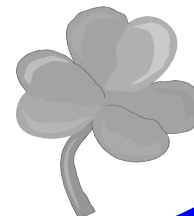




Biochemistry and Molecular Biology

NOTES



Volume 15, No, 12

March, 2003

Sigma Xi Graduate Research Competition offers cash prizes

The campus chapter of the Sigma Xi Honor Society will sponsor its annual Graduate Research Competition on Monday, April 14. This competition is open to the public and will take place in the Van Nuys Medical Sciences Building, rooms 311 A and B. Faculty and staff are invited to encourage student participation in this forum to showcase their research and communication skills.

Presentations are judged by a panel of IUPUI faculty and cash prizes will be awarded to students for outstanding research presentations. The competition is open to all IUPUI students enrolled in the Graduate School as of March 1 who have not yet defended their dissertation/thesis by the time of the competition.

Student abstracts will be judged based upon a written abstract describing their research, and their oral presentation. Qualifying abstracts will be selected for 10 minute to 12 minute oral presentations that will be followed by a brief question period. Students at all stage of their career and training are encouraged to participate.

Abstract forms for the competition are available by e-mail from the chapter president, at jblum@iupui.edu. **The deadline for abstract submission is Wednesday, April 2.** Abstracts should be returned by e-mail or campus mail to Dr. Janice Blum Department of Microbiology and Immunology, 420 MS Bldg.

New Bioinformatics Director to have appointment in Biochemistry and Molecular Biology

Keith Dunker, PhD, a nationally recognized bioinformatics expert, will join IUSM as director of the Center for Bioinformatics and Professor of Biochemistry and Molecular Biology effective July 1.

Dr. Dunker received his doctorate in biophysics from the University of Wisconsin in 1969. As a postdoc at Yale he studied molecular biophysics. He was a research associate in virology at Sloan Kettering Institute before joining the faculty of Washington State University in August 1975.

Dunker's personal research interest is the relationship between folding of proteins and their function, particularly non-structured or "natively disordered" regions of proteins.

February Seminars

*Biochemistry Seminars
Mondays 4 pm, MS 326*

3/3 Dr. Peter A. Jones, Director, USC/Norris Comprehensive Cancer Center, Distinguished Professor, Biochemistry & Molecular Biology Department, University of Southern California, Keck School of Medicine, Los Angeles, CA. "Epigenetics of Human Cancer"

3/10 Dr. Panos Z. Anastasiadis, Assistant Professor, Scientist, Dept. of Human Biological Chem. & Genetics, Sealy Center for Cancer Cell Biology, University of Texas Medical Branch, Galveston, TX. "Role of the Cadherin-p120 Catenin Pathway in Cell Motility and Invasiveness"

3/17 Dr. Richard G. Moran, Professor, Department of Pharmacology and Associate Director for Basic Research, Massey Cancer Center, Virginia Commonwealth University, Richmond, VA. "Tetrahydrofolate Antimetabolites and Cancer: The Frontiers are an Epigenetic Mechanism, a Mitochondrial Transporter, and a Frustrating Active Site"

3/24 Dr. Tsonwin Hai, Associate Professor, Department of Molecular & Cellular Biochemistry, Neurobiotechnology Center, Comprehensive Cancer Center, Ohio State

University, Columbus, OH. Topic: "ATF3 in Stress Responses: Signal Transduction, Cell Death, and Disease Models"

3/31 Dr. Christine A. Hrycyna, Walther Assistant Professor, Department of Chemistry, Purdue University, West Lafayette. "Molecular Targets for Cancer Therapeutics"

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

3/5 Amy Munchhof

3/12 Yaritzabel Roman

3/26 Monique Pierre

*IUSOM Combined Seminar Series
Wednesdays, 4:00 pm, Cancer Res (R4) Auditorium 101*

3/5 Stem Cell Trafficking: A New Frontier in Stem Cell Research? Thaila Papayannopoulou, M.D., Dr. Sci., Dept. of Medicine, Div. of Hematology, University of Washington; Seattle, WA.

3/12 Progress Toward Optimizing Immune Deficient Mouse Models for Human Hematopoietic and Mesenchymal Stem Cell Homing and Plasticity. Jan Nolte, Ph.D., Div. of Oncology, Sect. of Stem Cell Biology, Washington University; St. Louis, MO.

Biochemistry and Molecular Biology Research Seminar Series Every other Thursday, 12:00 noon MS 311 A/B

3/13 Yu Li, Graduate Student, Department of Biochemistry and Molecular Biology, Indiana University School of Medicine, Indianapolis, Indiana. "Rap1 regulation by Ras and Epac2; and functional analysis of Rap1A in mouse neutrophils"

3/27 Dr. Hao Yuan Jiang, Postdoctoral Fellow, Department of Biochemistry and Molecular Biology, Indiana University School of Medicine, Indianapolis, Indiana. "Interaction between eIF2 kinases and NF- κ B pathway during cellular stresses"

Other Seminars of Interest

3/3 9:00 a.m. Modeling and Simulation in Systems Biology. Regenstrief Institute Medical Informatics Computational Molecular Biology Series. **Michael Hucka, Ph.D., Researcher, California Institute of Technology; Pasadena, CA.** Cancer Research Institute [R4] Auditorium 101.

3/13 4:00 p.m. Morphing the Virion Machine During Poliovirus Entry: New Tricks From an Old Virus. Marie Chow, Ph.D., Depts. of Microbiology and Immunology and Pathology, University of Arkansas for Medical Sciences; Little Rock, AR. **VanNuys Medical Science 326.**

Recent Publications

(Seminars, Continued)

3/19 4:00 p.m. Hox and Polycomb Group Genes in the Regulation of Stem Cell Proliferation. Guy Sauvageau, M.D., Ph.D., Scientific Director, Leukemia Cell Bank of Quebec, and University of Montreal; Montreal, Quebec; Canada.
Cancer Research Institute [R4] Auditorium 101.

3/24 9:00 a.m.
Bioinformatics Strategy for Cancer Therapy Design.
Regenstrief Institute Medical Informatics Computational Molecular Biology Series.
Dr. Sylvia B. Nagl, Senior Research Fellow, Dept. of Biochemistry/Molecular Biology, University College of London; London, England.
Cancer Research Institute [R4] Auditorium 101.
[RSVP to Anne Marie Johnson at 317-630-8134 or amjohnson@regenstrief.org.]

ISLET BIOLOGY JOURNAL CLUB
DALY CENTER 122A 4-5 pm

Speaker	Date
Mark Deeg	Mar 6
Hiremagalur Jayaram	Apr 3
Lawrence Quilliam	May 1

Daleke, D. (2003) Regulation of transbilayer plasma membrane phospholipid asymmetry. *J. Lipid Res.* 44: 233-242.

Mark R. Kelley, Yoke W. Kow, and David M. Wilson, III (2003) Disparity between DNA Base Excision Repair in Yeast and Mammals: Translational Implications. *Cancer Res* 63: 549-554.

Melissa L. Fishel, Young R. Seo, Martin L. Smith, and **Mark R. Kelley** (2003) Imbalancing the DNA Base Excision Repair Pathway in the Mitochondria; Targeting and Overexpressing N-Methylpurine DNA Glycosylase in Mitochondria Leads to Enhanced Cell Killing. *Cancer Res* 63: 608-615.

Congratulations!

David Daleke and his wife Stephanie welcomed their new daughter, Antonia Biehn Daleke, on February 10, 2003 (8 lbs.4.8 oz., 20 in.). Mom and daughter are both doing well.

Mark Kelley is now also a member of the Dept of Pharmacology and Toxicology so please make this addition to your lists, mailings and for itineraries, etc.

Here is the short piece about the Molecular Medicine in Action (MMIA) animations that has just appeared in the Jan 31 issue of Science mag.!
(Mark Kelley)

IMAGES: How to Change a Broken Gene

With gene therapy in the headlines again, teachers might be looking for a simple explanation of this promising but troubled technique. Although created for high school students, this collection of animations from the Indiana University School of Medicine is also suitable for lower-division college classes. The students are walked through the steps in gene therapy, such as loading refurbished genes into a virus and delivering them to their targets in the body.

Another clip explains a protocol for using a mouse retrovirus to treat Fanconi anemia, an inherited deficiency of blood cells. Students can also explore the workhorses of the molecular biology lab, such as electrophoresis, PCR, and flow cytometry.

*Happy
St. Patrick's
Day*

On the Move

Several Biochem labs and offices are on the move in March 2003:

Joyce Hurley has moved into the office in MS 4003, formerly used by Mu Wang. Her lab remains in MS 402. She can be reached in her office at 278-7904.

Mark Goebel is now in MS 402, which was most recently occupied by Frank Witzmann. Mark's office is in MS 405 located inside the hallway leading back to the lab areas of 402 and 404. The phone numbers remain the same: Goebel office 274-055; Goebel lab 274-3743.

Effective March 4, **Maureen Harrington** will relocate from the R4 Cancer Research building to MS 4071, recently vacated by Mark Goebel. Her office will be in MS 4071F. Those phone numbers also remain the same: Harrington office 274-7527; Harrington lab 274-7528.

The **BBF DNA Sequencing Drop-off** has moved to MS 4037. This was previously occupied by Judy White.

On March 10, **Millie Georgiadis** leaves the R4 building to take up residence in MS 4032, the former BBF space. Her office will be in MS 4032B. She'll use the same phone numbers: Georgiadis office 278-8486; Georgiadis lab 278-8827.

On March 17, **Bob Harris' lab** will move to Rooms 333 and 335 at BRTC. His office will remain in MS 4053 until a new chair is appointed. All phone numbers remain the same: Harris office 274-1586; Harris lab 274-4827.

The Department extends its' deepest sympathy to **Joyce Hurley** on the death of her father, John M. Harts.

Our condolences to **Gary Harden** whose father, Sibert Harden, passed away Tuesday, February 18.

Important Dates

- 3/1 NIH Competing Continuation and Revised Grants
- 4/18 Campus Holiday
- 5/26 Memorial Day
- 6/1 NIH New Research
- 7/1 NIH Competing Continuation and Revised Grants
- 7/4 Independence Day
- 9/1 Labor Day
- 10/1 NIH New Research
- 11/1 NIH Competing Continuation and Revised Grants
- 11/27 Thanksgiving
- 11/28 Friday after Thanksgiving
- 12/25 Christmas
- 1/1/04 Happy New Year!

BBF DNA Sequencing Drop-off and Delivery Service

As many people know, the BBF (Biochem Biotech Facility) moved to the new BRTC building in February. But did you also know that we offer a DNA Sequencing drop-off service in the Biochem Department with daily deliveries (Monday - Friday) to the BBF? Simply drop off samples in the specially marked freezer in MS 4037 (turn right after leaving the elevators; it's before the Biochem Conference Room) and leave the paperwork in the tray. In the afternoons we deliver them to the BRTC for processing. Please contact Oun Kheav in the BBF at 274-5044 for more information.