



# PATHOLOGY NEWS

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Dear Colleagues:

The holiday season is approaching and yes, we have a lot to be thankful and a lot to look forward to with the New Year. I am personally proud to be a part of a Department that has made progress in all aspects of clinical service and academic life... from the impressive work of our students and trainees to the sophisticated work of our faculty. As this issue of the newsletter shows the awards obtained by our trainees, I must also mention that we are moving into service technology areas that are state-of-the-art and cutting edge technology for diagnostic and clinical pathology. We are one of the first institutions to take on these technologies.

I hope all of you will continue to do your best and enjoy the holidays. If there is anything I can do to assist with your career aspirations, please let me know.

With best wishes for a Happy Thanksgiving and  
Holiday Season.

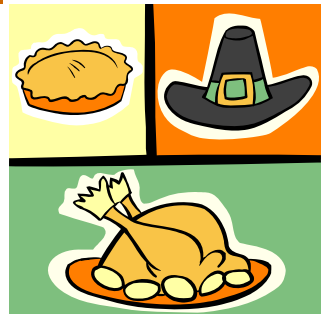
George K. Michalopoulos, M.D., Ph.D.

### **Administrative Office Coverage**

*December 24, 25, 31 and January 1,3—Offices closed  
December 27-30 office open  
with minimal staffing.*

*The University will be closed on Monday,  
January 17, 2011 in observance of Martin  
Luther King Day.*

*Minimal staff on Friday, March 11, 2011 in  
observance of Spring break.*



"Thanksgiving comes to us out of the prehistoric dimness, universal to all ages and all faiths. At whatever straws we must grasp, there is always a time for gratitude and new beginnings."

~J. Robert Moskin



## ADMINISTRATIVE OFFICE UPDATE



### View Your Pay Statement On-line

We are pleased to announce that University of Pittsburgh employees, *with the exception of Federal Work Study and undergraduate student workers*, can now access pay statements on-line through My Pitt (my.pitt.edu). This new service offers:

- Secure on-line access to pay statements on pay day
- The ability to view current and past pay statements
- 24/7 access from any computer

#### Directions for accessing your pay statements

1. Navigate to the University portal, My Pitt, at [my.pitt.edu](http://my.pitt.edu).
2. Enter your University Computing Account username and password.  
\*Note: if you have forgotten your username or password, contact the Technology Help Desk at 412-624-HELP (4357) for assistance.
3. Click on the "Log In" button.
4. Click on the "PRISM Login" link.
5. Select "PHR Employee Self-Service" responsibility.
6. Select "Pay Statement".

Please remember to always follow the University of Pittsburgh's computer security policies. For additional guidelines on safe computing, visit the Information Technology site at <http://technology.pitt.edu/security.html>

For Frequently Asked Questions related to the new on-line pay statement, please visit the Payroll website @ [www.bc.pitt.edu/payroll](http://www.bc.pitt.edu/payroll)

In the near future, paper deposit advices will be discontinued for employees that are paid on a monthly basis. A transition will take place over several months in order to provide time for you to become familiar with viewing your information on-line. We will notify you in advance of the actual date that paper advices will no longer be distributed. If you are not already enrolled in Direct Deposit, help us Go Green by signing up today. Forms are available at: <http://www.bc.pitt.edu/payroll/documents/DirectDepositformupdated040110.pdf>

"Men love  
to wonder,  
and that  
is the  
seed of  
science."

~Ralph Waldo  
Emerson

## Happy Retirement

**Dr. Leon Barnes**, Director of Head and Neck Pathology, will retire at the end of this year. Dr. Barnes has been with the Department of Pathology for 36 years. He has attained national acclaim as a Head and Neck Pathologist.

**Dr. Sikardar Katyal**, Associate Professor in the Division of Experimental Pathology, will retire in February of 2011. He has been a member of the Division for 39 years. He has contributed to research in the field of pulmonary biology and has been a dedicated and contributing member of the faculty.

A retirement reception will follow the faculty meeting on Friday, December 17 at in room 1105AB Scaife Hall.



# FACULTY HIGHLIGHTS

**Charleen Chu, M.D., Ph.D.** Elected to the American Society for Clinical Investigation (one of six nominees)

**Rajiv Dhir, M.D.** The Clinical and Translational Science Institute (CTSI) has been given authority by the University to grant secondary appointments in Clinical and Translational Science. In recognition of his contribution to the CTSI as the medical director of the Health Sciences Tissue Bank and, more broadly, his research contributions to clinical and translational research, he has been given a secondary appointment.



Dr. Charleen Chu



Dr. Wendy Mars

**Dr. Wendy Mars** has been named the 2010 BGSA Distinguished Mentor Award Winner!!

**George K. Michalopoulos, M.D., Ph.D.** received the American Liver Foundation's Distinguished Scientist Award at the Annual AASLD meeting October 29-November 2 in Boston, MA.

**Parmjeet Randhawa, M.D.**, Member, Founding Executive Committee, Community of Practice: Transplant Diagnostics, under the auspices of The American Society of Transplantation, 2010 – 2012.

**Dr. Darrell Triulzi** is president elect of the AABB at the AABB annual meeting in Baltimore MD Oct 12 2010.

**Liron Pantanowitz, M.D.**

Pantanowitz L, Carbone A, Dezube BJ. Historical perspective of plasmablastic lymphoma. In: Plasmablastic lymphoma. An emergent disease with poor prognosis. Castillo JJ (editor). VDM Verlag Dr. Muller, Germany. 2010; pp 3-15.

*American Society of Cytopathology (ASC) has awarded the following:*

**Walid Khalbuss, M.D.**, elected Chair of the Educational Planning Committee

**Liron Pantanowitz, M.D.**, elected Chair of the eJournal Committee

**Drs. Walid Khalbuss & Liron Pantanowitz** elected as members of the Continuing Educational Oversight Committee

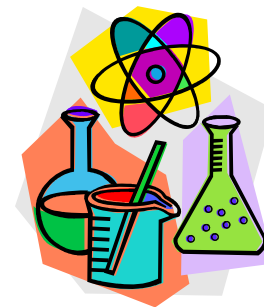
**Anil Parwani, M.D., Ph.D. and Liron Pantanowitz, M.D.** are co-investigators for a NIH sponsored training program entitled: Pittsburgh Biomedical Informatics, NLM 2010 Curriculum Supplement from July 1, 2010 to June 30, 2011. Funding amount is \$16,464.

**Jian Yu, Ph.D. (PI) on the following grants**

NIH/NIDDK Intestinal Stem Cell Survival and Renewal Coordinately Regulated by PUMA and p21 09/01/09-8/31/14

NIH/NIDDK Transcriptional Responses of the CBCs to Gamma-irradiation 09/01/10-8/31/11

Research Scholar Grant—Molecular Mechanisms of Radiation-induced Intestinal Injury 07/01/10-06/30/14 American Cancer Society



## CELLULAR AND MOLECULAR PATHOLOGY PROGRAM UPDATE AND SUMMER UNDERGRADUATE RESEARCH PROGRAM (SURP) UPDATE

*I am happy to report that our program continues to do quite well. During the course of the past year, eight students graduated, including 2 this past fall; however, we added 3 new students (2 from IBGP and 1 from MSTP), giving us a current total of 35 students and making us one of the largest of the six Interdisciplinary Program affiliates. Despite losing three faculty members through career changes, overall our faculty numbers have remained stable. This past academic year we also added three new faculty members to CMP: **Yaki Barak, Ivona Pandrea, and Bryan Tillman**, keeping our current total at 65! Please remember to tell interested faculty about joining CMP. We are always interested in adding qualified SOM faculty to our graduate program.*

*Good things continue to happen with our outstanding CMP students and faculty. At the recent Biomedical Graduate Student Association (BGSA) symposium, **Abbie Lade** (mentor, **Paul Monga**) was selected as one of the 6 student speakers from approximately 200 attendees, whereas, **Sam Cherra** (mentor, **Charleen Chu**) was given the award for most significant first author publication and asked to give a talk on his work in the afternoon. **Liang-I Kang** won the award for the best poster presentation in the CMP category (~35 students) and her mentor, **Dr. Wendy Mars**, won the BGSA distinguished mentor award, with **Dr. Paul Monga** selected as one of the two runners up from the SOM graduate faculty.*

*CMP recently underwent an external review that was quite complimentary to the program over all. As a follow up to that review, meetings of the CMP faculty and students were held September 27 and 28, 2010, respectively, in order to discuss recommendations from the reviewers. At the meetings, the results from the recent CMP external review were discussed with an eye towards implementing changes to the current program that would address the issues identified by the review. As most of you should know, there has been online voting regarding specific changes to the program structure. If implemented, these changes will allow for us to have formal curriculum and succession committees, as well as a monthly meeting for all CMP students where they present their work to their peers and invited faculty. If you have not yet voted, please do so. **Voting will close on November 30.***

**Hold these dates...**our annual retreat will be **June 3, 2011** with on campus speakers and an evening poster session at the University Club. More information will follow in the next newsletter. The **Summer Undergraduate Research Program (SURP)** will begin on **May 31, 2010**. For SURP, we are actively seeking interested faculty willing to host college undergraduates in their laboratories for a 10-week scientific research experience. SURP is a highly competitive outreach program, specifically designed to recruit high quality students into applying for graduate degrees through the University of Pittsburgh School of Medicine (UPSOM) programs such as the Interdisciplinary Biomedical Graduate Program and the Medical School. As the reputation of our program has grown, we have begun to attract high quality students from Universities such as Cornell and MIT, with the average GPA approximately 3.8.

### ***The specifics of SURP are as follows:***

*The cost to the individual investigator is \$3500.00. In some cases, there may be supplemental funding from UPSOM. Please contact me at 412-648-9690 or [wmars@pitt.edu](mailto:wmars@pitt.edu) if you are interested in learning more about these funding opportunities.*

*The program will run from **May 31-August 5**. Students are expected to have a specific project that they work on full time. They are also expected to attend supplemental programming 1-2 hours a week. At the end of the experience they must write an abstract and do a 10-minute power point presentation of their work.. Student housing and travel will generously be provided by UPSOM.*

*The success of this program relies on quality mentors well as quality students. Part of our past success has been due to participation of interested faculty such as you. In addition, we have implemented several techniques designed to attract the highest quality students to our program such as a shared online application process. I would venture that many of you who have participated as SURP mentors in the past can attest to the quality of the students that we are attracting. **You need not be graduate faculty to take on a student.***

If you have any questions or are willing to be a mentor this year, please contact me at 412-648-9690, or via e-mail at [wmars@pitt.edu](mailto:wmars@pitt.edu). The application process has already begun. Also, remember that if you are interested in having issues brought before the CMP steering committee, please share them with either our CMP administrator, Shari Tipton ([tiptonsl@upmc.edu](mailto:tiptonsl@upmc.edu)), or with me ([wmars@pitt.edu](mailto:wmars@pitt.edu)).

*Thanks so much!*

**Wendy M. Mars, Ph.D.**

*Director, Pathology SURP and CMP Graduate Program*

# MEDICAL STUDENT, RESIDENCY AND FELLOWSHIP PROGRAM UPDATE

## The Intersociety Council for Pathology Information

Awarded the Department of Pathology \$1000 in matching funds for the Medical Student Interest Group.

### Dr. Gaurav Sharma

- Junior member on College of American Pathologists CAP-DIHIT (Diagnostic Intelligence and Health Information Technology) Committee.
- received a travel award to attend the 2010 Pathology informatics Meeting in Boston - totaling \$1,800
- received 2010 Leadership Development Award at CAP Meeting in Chicago.
- junior Editor of *Journal of Pathology Informatics Awards at Pathology Informatics 2010 Meeting, Boston: Honorable Mention (Web based Informatics) Best Scientific Session (Edu-imaging)*



*CAP Foundation Leadership Development Award 2010  
From left to right: William Bishop, DO (USC), Gaurav Sharma, MD (UPMC) and Roseann Wu, MD PhD (MGH), Jennifer Hunt MD (CAP Foundation Chair) and Stanley Robboy MD (CAP President Elect).*

Sharma G, Dangott BJ, Piccoli A, Wiehagen LT, Kelly SM, Stewart WR, Yousem SA, Pantanowitz L, Parwani AV. Reduction In Slide Label Mis-Identifications Due To Implementation Of 2 Dimensional Bar Coding. *J Pathol Inform* 2010, 1:18 (8).

Sharma G, Hagenkord JM, Harper TH, Pantanowitz L, Parwani AV. Evaluation of the Utility of a Virtual Rotation in Pathology Informatics. *J Pathol Inform* 2010, 1:18 (57).

Sharma G, Saleh AA, Parwani AV, Pantanowitz L. A Preliminary Analysis of the Pathology Informatics Literature. *J Pathol Inform* 2010, 1:18 (33).

Sharma G, Parwani AV, Pantanowitz L. Lessons Learned From Telepathology Problems and Technical Failures. *J Pathol Inform* 2010, 1:18 (57).



## MEDICAL STUDENT, RESIDENCY AND FELLOWSHIP PROGRAM UPDATE

Sharma G, Chenevert J, Dangott BJ, Muse A, Duboy JD, Pantanowitz L, Barnes L, Parwani AV. Development Of A Head And Neck Pathology Digital Slide Teaching Set For Trainee Education. *J Pathol Inform* 2010, 1:18 (33).

Sharma G, Kant JA. Clinical Genetics Meeting Update. *CAP Today*. Vol.24 No.9. September 2010, (126)

**Nidhi Aggarwal, M.D.**, Chief Resident. Selected for the Arthur Purdy Society stipend for 2010 for my elective in Renal Pathology at Brigham and Women's Hospital in November.

The Medical Student Training Program retreat recognized Pathology graduate students and faculty:

**Dr. Satdarshan Pal Monga** 2010 William E. Brown Outstanding MSTP Mentor Award

**Cyrus Raji** (CMP 2009 graduate) 2010 Drs. S. Sutton Hamilton MSTP Scholar Award Honorable Mention

**Corrine Kliment** (CMP 2009 graduate) 2010 Drs. S. Sutton Hamilton MSTP Scholar Award



*AP Foundation Travel Award to Pathology Visions  
2010 From left to right: Gaurav Sharma, MD  
(UPMC), Rhona Cooke, MD (UTMB),  
Jason Hipp, MD (U Michigan) and  
Dirk Soenksen*

**A pessimist is one who makes difficulties of his opportunities and an optimist is one who makes opportunities of his difficulties. ~Harry Truman**

# MEDICAL STUDENT, RESIDENCY AND FELLOWSHIP PROGRAM UPDATE

## **USCAP Alumni and Department Luncheon**

Sunday, February 27, 2010 – 12:00 noon to 1:00 pm - San Antonio

Room to be announced

*All faculty, residents, fellows and alumni invited.*

## **USCAP Fellowship Fair**

Sunday, February 27, 2010 – 5:30 pm to 7:30 pm - San Antonio

## **Residency and Fellowship Program**

- The recruitment for the Class of 2011 has begun with interview dates through January 21, 2011.
- Several trainees have received awards which are listed elsewhere in the newsletter.
- A post-graduate survey has been initiated to be sent to resident graduates five years after graduation.
- ACGME External Site visits scheduled:
  - Tuesday, November 16, 2010 Residency Program
  - Wednesday, November 17, 2010 GYN/Breast Fellowship Program
  - Thursday, November 18, 2010 Transfusion Medicine Fellowship Program

*Faculty are reminded to complete their evaluations of residents.*

## **Graduation – Save This Date**

The 2011 graduation ceremony will be held on **Saturday, May 7, 2011** from 6:00 pm to 10:00 pm at the Herberman Conference Center.

## **Medical School Curriculum**

- Dr. Mona Melhem is leading an integration pilot of ‘in-laboratory sessions’ for medical students at the VA doing their medicine clerkship
- The School of Medicine has requested that we develop a proposal for a Pathology Longitudinal Clerkship for all medical students.

**Trevor Macpherson, M.D.**  
**Director, Department of Pathology Teaching**

## PRESENTATIONS

### **George K. Michalopoulos, M.D., Ph.D.**

Invited Speaker: "Liver Growth and Regeneration," FASEB Summer Research Conference on Liver Growth, Injury and Metabolism: Basic and Applied Biology. Snowmass, CO, August 15-20, 2010.

Moderator, Early Morning Workshop, Liver Regeneration Session, American Association for the Study of Liver Diseases, Boston, MA October 29-November 2, 2010.

### **Parmjeet Randhawa, M.D.**

Role of a Renal Allograft Biopsy in the Management of Kidney Transplantation Patients. Surgical Pathology of Solid Organ Transplantation, May 7, University of Pittsburgh, Pittsburgh, May 7, 2010.

Infectious Disease in Transplantation Pathology. Surgical Pathology of Solid Organ Transplantation, May 8, University of Pittsburgh, Pittsburgh, May 7, 2010.

Tyrosine Kinase Inhibition as a Strategy to Control Polyomavirus BK Replication. American Society of Transplantation, San Diego Convention Center, San Diego, CA, May 1-5, 2010

Antibody mediated rejection in the kidney. Department of Pathology, Makerere University , College of Health Sciences, Kampala, Uganda, September 20, 2010

Tubulo-interstitial diseases in the kidney. Department of Pathology, Makerere University , College of Health Sciences, Kampala, Uganda, September 21, 2010

Non-proliferative glomerulonephritis. Department of Pathology, Makerere University , College of Health Sciences, Kampala, Uganda, September 21, 2010.

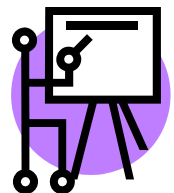
### **Steven H. Swerdlow, M.D.**

"Non-Hodgkin Lymphoma", 17<sup>th</sup> Annual Pathology Seminar, April 30, 2010, Pittsburgh, PA.

"Aggressive B-cell lymphomas – what to expect from your hematopathologist in 2010", Southern California Lymphoma Group Meeting, May 5, 2010, Los Angeles, CA.

Visiting Professor, "The Pendulum is Swinging", and Slide Seminar, University of California, Los Angeles, May 5, 2010, Los Angeles, CA.

"CD56 positive follicular T-cell lymphoma with features of angioimmunoblastic T-cell lymphoma (case presentation)." International Lymphoma Study Group, Dinard, France, May 31, 2010.





## PRESENTATIONS

“Study of intestinal gamma-delta T-cell lymphomas.” International Lymphoma Study Group, Dinard, France, June 1, 2010.

“The ever-evolving classification of malignant lymphomas & its practical application in 2010, and “Current approach to the aggressive B-cell lymphomas.” Florida Society of Pathologists, Summer meeting, June 26-27, 2010, Key Biscayne, Florida.

“Early CLL/SLL with perifollicular growth pattern” case presentation, XV Meeting of the European Association for Haematopathology, September 25-October 1, 2010, Upsalla, Sweden.

Hematopathology from A to Z for the Practicing Surgical Pathologist, Course Director and 5 lectures (Approach to the diagnosis of lymphoid proliferations & our diagnostic armamentarium; Lymphoma classification – an update & overview; Nodal & splenic small B-cell lymphomas; Aggressive B-cell lymphomas and their differential diagnosis; B-cell lymphomas, a case-based presentation), October 18-21, 2010, The Mauna Kea Resort, Big Island of Hawaii.

Meet the Professor Lecture “WHO Classification: Current Issues and Future Perspectives”, Japanese Society for Lymphoreticular Tissue Research, Nagoya, Japan, October 27, 2010.

### **Jian Yu, Ph.D.**

“A Dominant Role of p21 in Intestinal Regeneration Following Irradiation”, NIDDK Intestinal Stem Cell Consortium Steering Committee Meeting, April 22-23, 2010, City of Hope, Duarte, California

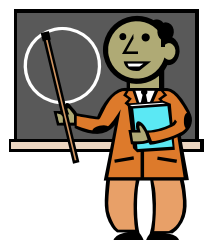
“The Intestinal Stem Cells in Injury and Cancer”, Sun Yet-Sen University, Zhongshan School of Medicine Chancellor Seminar Series, June 1, 2010, Guangzhou, P. R. China

“The Intestinal Stem Cells in Injury and Cancer”, the third Military Medical University, Research Institute of Daping Hospital, June 8, 2010, Chongqing, P. R. China

“Dying Intestinal Stem cells, Good or Bad?”, BIT’s 3<sup>rd</sup> Annual World Cancer Congress, June 22, 2010, Singapore

“Role of PUMA in EGFR targeted therapies in HNSCC”, the American Head and Neck Society (AHNS) 2010 Research Workshop on the Biology, Prevention & Treatment of Head & Neck Cancer October 28-30, 2010, Arlington, Virginia

“Intestinal Stem Cells in Danger: to live or die? ”, Stem Cells in Cancer Symposium, part of the 25<sup>th</sup> Anniversary Celebration of the University of Pittsburgh Cancer Institute, Nov 5, 2010, Pittsburgh, Pennsylvania.



**PATHOLOGY  
RESEARCH SEMINAR  
SERIES**

“Pathology-Directed MALDI Mass Spectrometry Imaging for Identifying Tissue Biomarkers of Prostate Cancer and Renal Cell Carcinoma”

**Richard R. Drake Ph.D.**

Professor and Co-Director  
Center for Biomedical Proteomics  
Cancer Biology and Infectious  
Disease Research Center  
Eastern Virginia Medical School  
Norfolk, VA

**Wednesday, January 12, 2011**

Noon

1104 Scaife Hall

“Keap1-Nrf2 Signaling: Targets for Disease Prevention”

**Thomas W. Kensler, Ph.D.**

Professor, Department of  
Pharmacology and Chemical  
Biology

University of Pittsburgh

**Wednesday, January 19, 2011**

noon

1104 Scaife Hall

Title: TBA

**Michael B. Prystowsky, M.D.,  
Ph.D.**

Leopold G. Koss, M.D., Chair  
Department of Pathology  
Albert Einstein College of  
Medicine  
Bronx, NY

**Wednesday, January 26, 2011**

noon

1104 Scaife Hall

**PUBLICATIONS**

Wang W, Ozolek JA, Slepcev D, Lee AB, Chen C, Rohde GK. [An optimal transportation approach for nuclear structure-based pathology](#). IEEE Trans Med Imaging. 2010 Oct 25. [Epub ahead of print]

Castro CA, Ben-Yehudah A, Ozolek JA, Mills PH, Redinger CJ, Mich-Basso JD, McFarland DA, Oliver SL, Ahrens ET, Schatten G. [Semiquantitative histopathology and 3D magnetic resonance microscopy as collaborative platforms for tissue identification and comparison within teratomas derived from pedigreed primate embryonic stem cells](#). Stem Cell Res. 2010 Nov;5(3):201-11. Epub 2010 Aug 6.

Randhawa P, Schonder K, Shapiro R, Farasati N, Huang C. Polyomavirus BK Neutralizing Activity in Human Immunoglobulin Preparations. Transplantation. Jun 27;89(12):1462-5, 2010.

Pantanowitz L, Parwani AV. Introducing the journal of pathology informatics. Journal of Pathology Informatics. 2010; 1:1.

Pantanowitz L. Digital images and the future of digital pathology. Journal of Pathology Informatics. 2010; 1:15.

Sullivan R, Pantanowitz L. New drug targets for Kaposi's sarcoma. Expert Opinion on Therapeutic Targets. 2010; 14:1-12.

Douglas JL, Gustin JK, Moses AV, Dezube BJ, Pantanowitz L. [Kaposi sarcoma pathogenesis: A triad of viral infection, oncogenesis and chronic inflammation](#). Translational Biomedicine. 2010; 1:2.

Chiao EY, Dezube BJ, Krown SE, Wachsmann W, Brock MV, Giordano TP, Mitsuyasu R, Pantanowitz L. Time for oncologists to opt-in for routine opt-out HIV testing? JAMA 2010; 304:334-9.

Chivukula M, Ahrendt G. Ductal carcinoma in situ: One size does not fit all. Women's Health (Lond Engl). 2010 Sep;6(5):669-72.

Felix AS, Weissfeld JL, Stone RA, Bowser R, Chivukula M, Edwards RP, Linkov F. [Factors associated with Type I and Type II endometrial cancer](#). Cancer Causes Control. 2010 Nov;21(11):1851-6. Epub 2010 Jul 14.

CSPG4 as a new target for antibody-based immunotherapy of triple negative breast cancer Wang X, T Osada T, Wang Y, Yu L, Sakakura, Katayama A, McCarthy JB, Brufsky A, Chivukula M et al. J Natl Cancer Inst. 2010 Oct 6;102(19):1496-512.

**PATHOLOGY  
RESEARCH SEMINAR  
SERIES**

Title: TBA

**Shanmugam Nagarajan, Ph.D.**

Associate Professor of  
Microbiology, Immunology  
Department of Microbiology,  
Immunology  
University of Arkansas  
Little Rock, AR

**Wednesday, February 2, 2011**

Noon  
1104 Scaife Hall

Title: TBA

**Don C Rockey, M.D.**

Dr. Cary G. King Jr. and Dr. Henry  
M. Winans, Sr.

Chair, Internal Medicine  
UT Southwestern Medical Center  
Dallas, TX

**Wednesday, February 16, 2011**

noon  
1104 Scaife Hall

Title: TBA

**Dafina Bonneh-Barkay Ph.D.**

Research Assistant Professor  
Division of Neuropathology  
University of Pittsburgh

**Wednesday, February 23, 2011**

noon  
1104 Scaife Hall

Wang P, Qiu W, Dudgeon C, Liu H, Huang C, Zambetti GP, Yu J, Zhang L. PUMA is directly activated by NF- $\kappa$ B and contributes to TNF- $\alpha$ -induced apoptosis. *Cell Death Differ.* 2009 Sep;16(9):1192-202. Epub 2009 May 15.

Yue W, Sun Q, Landreneau R, Wu C, Siegfried JM, Yu J, Zhang L. Fibulin-5 suppresses lung cancer invasion by inhibiting matrix metalloproteinase-7 expression. *Cancer Res.* 2009 Aug 1;69(15):6339-46. Epub 2009 Jul 7.

Wang P, Zou F, Zhang X, Li H, Dulak A, Tomko RJ, Lazo JS, Wang Z, Zhang L, Yu J\*. MicroRNA-21 modulates G2/M checkpoint and cell cycle progression through Cdc25A. *Cancer Res.* 2009 Oct 15;69(20):8157-65. Epub 2009 Oct 13.

Qiu W, Leibowitz B, Zhang L, Yu J\*. Growth factors protect intestinal stem cells from radiation-induced apoptosis by suppressing PUMA through the PI3K/AKT/p53 axis. *Oncogene.* 2010 Mar 18;29(11):1622-32. Epub 2009 Dec 7.

Gao J, Senthil M, Ren B, Yan J, Xing Q, Yu J, Zhang L, Yim JH. IRF-1 transcriptionally up-regulates PUMA which mediates the mitochondrial apoptotic pathway in IRF-1 induced apoptosis in cancer cells. *Cell Death Differ.* 2010 Apr;17(4):699-709. Epub 2009 Oct 23.

Yu H, Shen H, Yuan Y, Xu F, Hu X, Zhang L, Yu J, Zambetti G, Cheng T. Deletion of Puma protects hematopoietic stem cells and confers long-term survival in response to high-dose gamma-irradiation. *Blood.* 2010 Apr 29;115(17):3472-80. Epub 2010 Feb 22.

Qiu W, Wang X, Leibowitz B, Liu H, Barker N, Okada H, Oue N, Yasui W, Clevers H, Schoen RE, Yu J\*, Zhang L\*. Chemoprevention by nonsteroidal anti-inflammatory drugs eliminates oncogenic intestinal stem cells via SMAC-dependent apoptosis. *Proc Natl Acad Sci U S A.* 2010 Nov 1. [Epub ahead of print]

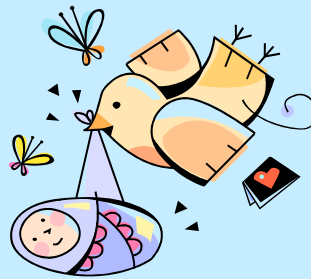
Leibowitz B and Yu J\*. Mitochondrial Signaling in Cell Death via the Bcl-2 Family. *Cancer Biol Ther.* 2010 Mar 3;9(6). [Epub ahead of print]

Yu J\* and Zhang L\* (2010) "Apoptotic Pathways in Cancer" in *Systems Biology of Cancer* (1st Edition, ed. Thiagalingam T, Cambridge University Press), book chapter (In press).

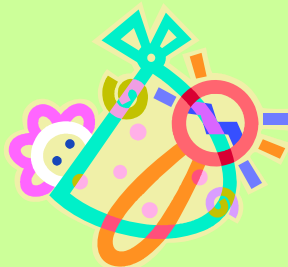


*Charlotte Ann Michalopoulos arrived a bit early, Thursday, September 30, 2010 weighing 4.5 lbs (now 6.5 lbs). Parents Sarah and Dino Michalopoulos are quite happy and Dr. Michalopoulos is now a proud granddad.*

**Baby Eli Louis Paterline arrived!  
Friday, September 10 at 1:15PM  
7 lbs. 9 oz.**



**Baby and Mom Nicole are doing fine!  
Dad Mitch is ecstatic!!!**



**Sherri Tipton in the Administrative Office is a new Grandma with daughter Britney giving birth to a healthy baby girl: Brielle Revee', September 26, 2:17am, 7lbs 3oz**

*Congratulations!*