

Pathology News

OCTOBER 31 , 2017

Chair's Blog
Page 1-2

Grant Administration
Page 3

Faculty Highlights
Page 4-5

Promotions
Page 5

SURP and CMP
Graduate Program
Page 6-7

Residency -
Fellowship
Page 18

Mentorship Program
Page 9

Publications
Page 10-13

Presentations
Page 14-15

Seminars
Page 16

Administrative
Updates
Page 17

CHAIR'S BLOG

Dear Colleagues:

The department is already into its new academic and fiscal year, having met all its obligations, academic, fiscal, diagnostic and scientific, in the previous year that ended on June 30, 2017. Even though we underwent a serious financial restructuring and had to streamline many of our sites, the services related to patient care and management of laboratories were delivered with perfection. I am expressing the gratitude of myself and of the department to all of you who participate in these activities. There was also an increase in the number of peer-reviewed funding, especially from NIH, reflecting the expanding directions of faculty in research. Our School of Medicine courses, both mandatory and elective, have been increasing in popularity, with some instances having more students applying than can be accommodated. The restructuring of the Graduate School by the School of Medicine has created a challenge for most programs, but a solid cooperation between all basic science departments and the firm participation of most of the students from Bioengineering has kept our classes with a balanced number of students. Cellular and Molecular Pathology is still one of the most popular programs. A new excellent team of first year residents and clinical fellows has joined our department. I salute the commitment of the chief residents in proving a welcoming forum for the new trainees. This is the second year of full independent leadership of the educational activities of our department by Dr. DeFrances. She has been very successful and I recently announced her appointment as Vice Chair for Pathology Medical Education.

Continued on next page



Just living
is not
enough...
One must
have
sunshine,
freedom,
and a little
flower.

Hans Christian
Andersen
1805-1875

Holiday Reminders

The University of Pittsburgh will be Thursday November 23-24 for the Thanksgiving Recess. UPMC will be closed Thursday, November 23.

The University of Pittsburgh will be closed Friday, December 22 through Monday, January 1, 2018. The Administrative Offices will be minimally staff and open during this time. University and Hospital offices will reopen Tuesday, January 2.

As I go to meetings with other Pathology Chairs (the annual All-US meeting and the separate one for the North-East states) I marvel at the rapid changes being introduced in all areas of pathology, especially in tissue diagnostics. There are several groups working to generate electronic “virtual slicing” of tissues without fixation and paraffin embedding, generating “pseudo-colored” H&E images that can be fed directly onto a computer screen. While that new technology will probably alter the frozen section world, it still cannot be used for immunohistochemistry...but there are some clever minds working on that as well. More to come...Artificial Intelligence (AI) is been applied to most aspects of modern medicine, including pathology. Currently we have many “single purpose” applications competing with diagnostic pathologists. However, in all current instances, the AI machine cannot recognize and pass judgment beyond the “single purpose” expertise on which it was trained. An AI trained on cancer XYZ, given a cancer ABC, will respond only by stating that “this is not an XYZ cancer”. The total body of knowledge of tissue based diagnostics is currently too large to be handled by any currently available AI device, but it is likely that new technologies will emerge in the future that will be mature enough to provide assistance and support to Pathology teams by automating many routine procedures and accelerating the time that it takes for making a diagnosis for a single case. In all of this, digital pathology will be an essential tool and the need for it, especially in large academic medical centers, is not any more in any doubt.

I would like to highlight some recent discoveries made in our department that have received much recognition in the scientific and clinical literature. In a paper published by Jianhua Luo in Nature Biotechnology, he embedded a “suicide gene” (Herpes virus thymine kinase) at the joint point of fusion genes in cancer xenografts and was able to eliminate all cancers by treating with Acyclovir. Most cancers have fusion genes (not just driver genes but also fusion genes not contributing to cancer behavior). All such genes can be implanted with “suicide genes” using CRISPR-Cas9. This “genome editing” approach makes it possible to eliminate cancers based on their faulty genomics without need for the currently applied toxic cancer treatments. Equally exciting is the progress made in Thyroseq, developed by Yuri and Marina Nikiforov, now in its third formulation, being more comprehensive and validated by clinical trial. Pancreaseq is another test developed by Aatur Singhi, which uses NGS to identify specific genes in cytology obtained from pancreatic cysts, in order to assess their malignant potential. Both Thyroseq and Pancreaseq have been very well received in the scientific and medical community.

Our nascent Liver Center (in collaboration with Internal Medicine) led by Paul Monga continues to grow, with many educational programs and research programs in place, getting ready to organize and submit for NIH support, a very difficult task.

Our faculty is creative and persistent. Working together, we have been able to meet all challenges. For that, I am grateful and thankful to all of you.

With sincere appreciation and best wishes for the upcoming holidays,

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

Menten Professor and Chair

Department of Pathology



Grant Administration

OFFICE OF RESEARCH REMINDER:S

The Office of Research will not submit any proposal that involves faculty who are non-compliant. Continuing projects will not be processed, as well, until the required compliance modules and annual disclosure forms are complete.

Employment Based I-485 Applicants should expect In-Person Interviews

According to the recent OIS newsletter, any applicant whose I-485 petition is receipted on or after March 6, 2017 will be subject to an in-person interview. If you are applying for Legal Permanent Residence as an Adjustment of Status based on employment you should plan for an in-person interview at the local USCIS office. The interview appointment request will be sent via a letter to the applicant. Report any and all address changes to USCIS via the AR-11 to ensure that your current address is on file with USCIS. Your family members included on the I-485 may be asked to attend the interview as well.

Under the current administration, Department of Homeland Security is resurrecting the in person interview requirement to “further strengthen” USCIS’s fraud detection and national security initiatives. The return of the mandatory interview, which had been waived at the discretion of USCIS since 2005, will likely cause further delays in the green card process.

Please note, all department Visa inquiries should be directed to Mary Lou Benedetti or April Lehman.

PERIS (Pitt Electronic Research Information Solution)

The University is rolling out a new electronic proposal development, routing and submission process. Pathology’s Pre-award staff was invited to participate in the testing of Phase 1. When the new system is in place use of PERIS will be mandatory. There will, also, be requirements for the Project Director/Principal Investigator within the new system. PERIS is expected to be in place by the end of the calendar year. More information will be forthcoming!

Charleen Chu, M.D, Ph.D., Dendrite regulation by the mitochondrial kinase PINK1: Implications for PD/LBD. NIH/ R01 NS101628 (Chu), September 1, 2017-May 31, 2022.

Supplement to: Regulation of Autophagy & Mitochondrial Recycling in neuronal cell death. NIH/ R01 AG026389, Sept 1, 2017-April 30, 2018.

“Success is
stumbling
from failure
to failure
with
no loss of
enthusiasm.”

Winston S. Churchill

1874-1965





Faculty Highlights

Yuri Nikiforov, M.D. Received The Sidney H. Ingbar Distinguished Lectureship Award at the ATA meeting. The award is: “endowed by contributions to honor the memory of Sidney H. Ingbar, recognizes outstanding academic achievements in thyroidology, in keeping with the innovation and vision that epitomized Dr. Ingbar’s brilliant investigative career. The Ingbar award is conferred upon an established investigator who has made major contributions to thyroid-related research over many years.”

Jeffrey Nine, M.D. Awards

Excellence in Education Award from Pitt Med Class of 2019

UPMC Quality Fair, 2nd Place Award for Sustained Innovation



Liron Pantanowitz, M.D., received the College of American Pathologists (CAP) President’s Honors Award for 2017.

Published a new textbook: *Atlas of Touch Preparation Cytopathology*, Liron Pantanowitz, Juan Xing, Sara E. Monaco.

Dr. Zhao Published a new book: *Cervical cancer screening and clinical management: cytology, histology, and colposcopy*. Chief Editors: **Chengquan Zhao**, Xianrong Zhou, Long Sui, Min Yang. Beijing Science and Technology Press, China, October, 2017.

Parmjeet Randhawa, M.D., Reviewer for Clinical Research and Field Studies Study Section, Infectious Diseases and Microbiology Integrated Review Group, NIH, NIAID, June 2017.

Nikola Vujanovic, M.D., was awarded Professor Emeritus in Pathology March, 2017.

Anette Duensing, M.D. Received a – grant from the Sarcoma Foundation of America 2017 (SFA 04-17): *Targeting the retinoid acid pathway: a new therapeutic strategy for IDH1/2-mutant chondrosarcomas* Shadyside Hospital Foundation (A. Duensing, N. Amankulor): *Therapeutically targeting the Vitamin A – retinoid acid pathway: A new therapeutic strategy for IDH-mutant malignancies.*–

Octavia Peck Palmer, Ph.D. , received a Dean Faculty Advancement Award (2017-2019).

Recipient, Fellow, American Association of Clinical Chemistry Academy

2017 Editor of the Clinical Laboratory News Dailies edition. The American Association of Clinical Chemistry’s flagship and award winning monthly news magazine.

Secretary, American Association of Clinical Chemistry, Division of the Clinical and Translational Science
Member, American Association of Clinical Chemistry Education Core Committee

George K. Michalopoulos, M.D., Ph.D., received a grant, *LSP1 Involved in Liver Regeneration Termination*, Department of Defense, U.S. Army, July 1, 2017-June 30, 2019.

Octavia Peck-Palmer, Ph.D. Grants/Contracts:

July 2017-2019 Dean Faculty Advancement Award

The Role of the ZNF816 gene in Cellular Metabolism and Inflammation During Infection

University of Pittsburgh

August 2017- January 2018

Site PI(10%) Evaluation of monocyte distribution width for early detection of patients having or developing sepsis pivotal trial study protocol Beckman Coulter, Inc-

October 2017- January 2018

PI (10%) Performance Assessment of Roche IL6 Assay for the PreciSe Trial Roche Diagnostics

Adriana Zeevi, Ph.D., received a corporate contract, The Transplant Clinical Development Program in Antibody Mediated Rejection (AMR), CSL July 1, 2017 to June 30, 2020, CSL Behring, LLC,

Promotions

Alex Soto-Gutierrez, M.D., Ph.D., promoted to Associate Professor with tenure., Division of Experimental Pathology.

Shirish Paranjpe, Ph.D., promoted to Research Associate Professor, Division of Experimental Pathology.



Jennifer Picarsic, M.D. and husband Nick
welcomed a daughter, *Maeve Teresa Picarsic*, born on June 27, 2017, 6 lb 5 oz, She was also welcomed by big brother *Brennan Picarsic* (2.5 yr old). All are doing well!



Here is a link to the video Pittsburgh submitted to Amazon:

<https://www.youtube.com/watch?v=XEw2Ky5XxDM>.

Pathology's very own **Dr. Jon Davison** is shown at 1:41.



Thursday, November 23, 2017

SURP AND CMP GRADUATE PROGRAM

From the desk of Dr. Wendy M. Mars

As most of you probably know by now, our parent IBGP program has undergone a reconfiguration, with two of the programs, Microbiology/Virology (MVM) and Immunology (IMM), forming a new program known as the Program in Microbiology and Immunology (PMI). The split occurred after recruiting for the IBGP program this year and all entering students were given an opportunity to choose between the IBGP and PMI. Out of 32 students who matriculated, 16 chose to affiliate with the IBGP. Transition years are generally hard; however, so far, things seem to be going smoothly for the students who elected to join the IBGP. We look forward to a substantial number of these students joining CMP next fall.

During the course of the past academic school year, five students graduated; and we matriculated 4 new students (2 from IBGP and 2 from MSTP), presently putting us at 25 students, so that we continue to remain one of the largest of the (now 4) Interdisciplinary Program affiliates. Also, despite losing some faculty members through career changes, overall our faculty numbers have been growing. This past academic year we added 5 new faculty members to CMP: Hun-way Hwang, Robert Lafyatis, Thomas Lozito, and Michael Morowitz (primary), and Chris Donnelly (secondary) making our current total 76, up 3 from last year at this same time. Hun-way is now the Director of Molecular Biology section of the Foundations course. Please remember to tell interested faculty to contact me if they are interested in joining CMP. We are always willing to add qualified SOM faculty to our graduate program if their interests match with ours.

SAVE THESE DATES:

On **May 23, 2018** we will hold our annual Pathology Retreat, combining our basic and clinical researchers for an afternoon of stimulating talks, once again followed by a poster session at the University Club. This year our keynote speaker will be Anna Mae Diehl, MD, the Florence McAlister Professor of Medicine at Duke University.

The Summer Undergraduate Research Program (SURP) will begin next year, on **May 21, 2018**. For SURP, we are once again 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.

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 Michael Oertel at mio19@pitt.edu if you are interested in learning more about these funding opportunities. Michael has been helping with SURP for the past 2 years and will be will be officially taking over management of the program this year!

The program will run from May 21-July 27. 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.

So, remember that Pathology research opportunities and funding are not just for undergraduates! There are also moneys available through our Klionsky Fellowship Program to help offset the costs for first year medical students (MS1) who wish to do summer research opportunities in Pathology. Information on competitive funding for this program can be found at <http://path.upmc.edu/medstudents.htm>. Contact Marie DeFrances (defrancesmc@upmc.edu) to hear more about the clinical learning we provide with this program.

Finally, if you are interested in having issues brought before the CMP steering committee, please share them with CMP administrator, Amanda Bytzura (bytzuraam@upmc.edu), or with me (wmars@pitt.edu).

Thanks so much!

Wendy M. Mars, Ph.D.

Director, Pathology SURP and CMP graduate program

FOR ACCESS TO WEB PAGE FOR ECU LOG-ON

ECU data for the academic year July 1, 2017 to June 30, 2018 for collection now. Please be sure your info is entered via our Department's web page link.

For faculty with a UPMC network ID, please use this link. Accessing this link off of the UPMC network will bring up a login prompt: <https://epssecure.upmc.com/ECUAdmin/auth/index.cfm>

For faculty without a UPMC ID, please use this link: <https://epssecure.upmc.com/ECUTrack/index.cfm>

These links are also available on the Department of Pathology webpage under links at: <http://path.upmc.edu/links.htm>.

From the home page select which ECU activity is to be logged, and whether the activity is for medical or graduate students. Then fill in all fields on the form with an option for a free-text note at the end. Confirmation will be given and the activity will be entered into the database for submission at the end of the academic term.

For questions or feedback, please contact Thomas Harper at ISD (harperth@upmc.edu). Thank you.

RESIDENCY AND FELLOWSHIP

From the desk of Dr. Marie DeFrances

Clinical Training Programs

Seven new pathology residents arrived July 1 and are settling in at UPMC.

Residency recruitment for next year began October 20th – the first of eight interview dates. Eight candidates will be invited for each Friday interview session through December 15, 2017.

We have 17 Fellows and 3 Clinical Instructors this year.

Recruitment for Fellows and Clinical Instructors to fill positions for the 2019 – 2020 academic year is underway.

The ACGME revised Section VI of the Common Program Requirements in February, 2017, with many changes going into effect July 1, 2017. The Pathology Residency and Fellowship Programs as well as the UPMC Graduate Medical Education Program are currently revising policies and practices to comply with the new requirements.

Two Pathology faculty, **Dr. Jeff Nine** and **Dr. Sara Monaco**, were among eight faculty nominated by second year medical students (Class of 2019) for the Excellence in Education Award – Lecturer Category (2017). Dr. Nine won the award! Congratulations to both Dr. Nine and Dr. Monaco for their outstanding dedication to medical student education!

Dr. Marie DeFrances presented at the Association of Pathology Chairs meeting in Washington, D.C., this past July. She discussed our department's novel approach to undergraduate medical education through the employment of Pathology Mini-Electives. These short courses (approximately 4 – 6 two-hour sessions offered during the Spring for 2 – 8 students) are designed to introduce first and second medical students to various disciplines of pathology through a combination of hands-on activities, interactive discussions and lectures. Numerous pathology faculty are involved. The presentation was met with great interest by pathology educators from across the U.S., many of whom are considering incorporating this format in their own medical school curricula.

The current Pathology Mini-Elective offerings are:

Introduction to AP Pathology (**Dr. Aatur Singhi**, Course Director)

Mini-Biopsy: Making Diagnoses with Fine Needle Biopsies with Radiological Correlation
(**Dr. Sara Monaco**, Course Director)

Multi-Disciplinary Approach to the Diagnosis of Musculoskeletal Neoplasms (**Dr. Karen Schoedel**, Course Director)

Personalized Medicine (**Dr. Simion Chiosea**, Course Director)

If any faculty member is interested in creating a new Pathology Mini-Elective, please contact Dr. DeFrances for more information.

Seven Klionsky Summer Research Fellows (**Charlton Otte**, **Talya Mandelkern**, **Yan Qi**, **Minting Yu**, **Minami Tokuyama**, **Sydney Green** and **Yonatan Carl**) participated in the third annual STEPS program. STEPS (Summer Training Experiences in Pathology for Medical Students) is designed to provide second year medical students with opportunities to observe the clinical practice of Pathology one morning a week while carrying out summer research in our department. Eight activities were planned in different subspecialties of pathology such as autopsy, clinical chemistry, cytology, blood banking, and genomic pathology. Thanks to all who helped make STEPS a success again this year!

Pathology Faculty Mentorship Program



Professional Development Seminar Series

Monday, January 29, 2018

save the date

4-5 pm

Room to be announced

An Inside Look at Tenure Stream Promotions

Tim D. Oury, MD, PhD

Professor of Pathology

Please join us in a discussion of tips to keep in mind as you build your CV towards promotions and appointments to Associate Professor with Tenure and full Professor with Tenure. Learn about areas of emphasis, how to prepare documents to facilitate smooth sailing, and common issues that could trigger the doldrums of extended discussion.

For purposes of planning, please RSVP to Mrs. Karen Weber, weberkm@upmc.edu; 412-624-7897, indicating if you will attend in person or via webinar. Feel free to submit in advance questions or topics you would like to see addressed, and your primary role(s) (research, education, clinical). There will be additional opportunities for written and oral questions at the end of the session.

Although parts of the presentation will be available by Webinar, you are strongly encouraged to attend in person. Discussions of anonymized examples of portfolios will not be recorded.

@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

For those viewing through the webinar:

Registration URL: <https://attendee.gotowebinar.com/register/5097274711976140292>

- Please register for the live Webinar as soon as possible
- After registering, you will receive a confirmation email
- You will be prompted to download the CitrixOnline application and install on your PC or Laptop
- Please contact your local PC Support if you need help installing the application or Ishtiaque Ahmed (ahmedi@upmc.edu) for questions.

NOTE: If possible, use Telephone/Speakerphone and dial-in instead of using desktop/laptop speakers for better audio quality. Telephone/Speakerphone Audio option is shown right at the Click to Join Webinar prompt.

Questions or comments?

Charleen Chu, MD, PhD

Vice Chair, Pathology Faculty Mentorship

ctc4@pitt.edu

PUBLICATIONS

Huang, T., Liu, R., Fu, X., Yao, D., Yang, M., Liu, Q., Lu, W.W., Wu, C., Guan, M. Aging reduces an ERRalpha-directed mitochondrial glutaminase expression suppressing glutamine anaplerosis and osteogenic differentiation of mesenchymal stem cells. *Stem Cells*. 2017 Feb;35(2):411-424.

Duan, B., Ye, D., Zhu, S., Jia, W., Lu, C., Wang, G., Guo, X., Yu, Y., Wu C., and Kang, J. HDAC10 promotes angiogenesis in endothelial cells through the PTPN22/ERK axis. *Oncotarget*, 2017 May 24;8(37):61338-61349. [PMC5617427](#)

Li, H., Deng, Y., Sun, K., Yang, H., Liu, J., Wang, M., Zhang, Z., Lin, J., Wu, C. *, Wei, Z. *, Yu, C. * Structural basis of kindlin-mediated integrin recognition and activation *Proc. Natl. Acad. Sci USA* 2017 Aug 29;114(35):9349-9354. doi: 10.1073/pnas.1703064114. Epub 2017 Jul 24.

Sun, Y., Guo, C., Ma, P., Lai, Y., Yang, F., Cai, J., Cheng, Z., Zhang, K., Liu, Z., Tian, Y., Sheng, Y., Tian, R., Deng, Y., Xiao, G., Wu, C. Kindlin-2 association with RhoGDI α suppresses Rac1 activation and podocyte injury. *J. Am. Soc. Nephrol.* 2017 Aug 3. pii: ASN.2016091021. doi: 10.1681/ASN.2016091021. [Epub ahead of print]

Tao X, Austin RM, Zjang H, Zhang L, Xiao J, Zhou X, Wang L, Zhao C (corresponding). Histopathologic Follow-up and Human Papillomavirus Test results with High Grade Squamous Intraepithelial Lesion Papanicolaou Test Results in China's Largest Academic Woman's Hospital. *Cancer Cytopathol.* 2017 Sep 8. [Epub ahead of print].

Yin F, Wang N, Wang S, Yu F, Sun X, Yu X, Luo B, **Zhao C**, Wang Y. HPV16 oncogenes E6 or/and E7 may influence the methylation status of RASSF1A gene promoter region in cervical cancer cell line HT-3. *Oncol Rep.* 2017;37(4):2324-2334.

Baowen Zheng, R. Marshall Austin, Xiaoman Liang, Guijian Wei, Jia You, Yaoming Liang, **Chengquan Zhao** (corresponding). Conventional Pap Smear Cervical Cancer Screening in 11 Rural Counties in Hainan Province, China: Analysis of Bethesda System Reporting Rates for 218,195 Women Screened in China's National Cervical Cancer Screening Program in Rural Areas (NCCSPRA). *J Am Soc Cytopath*, 2017;6(3):120-125

Baowen Zheng, Huaitao Yang, Zaibo Li, Guijian Wei, Jia You, Xiaoman Liang, **Chengquan Zhao** (corresponding). *Journal of Cancer*. 2017 Jul 23;8(13):2436-2441.

Zhilian Wang; Jintao Wang; Jinrong Fan; Weihong Zhao; Xin Yang; Lingmei Wu; Dongyan Li; ling Ding; Wei Wang; Junjie Xu; Michelle Stram; **Chengquan Zhao**; Min Hao. Risk factors for cervical intraepithelial neoplasia and cervical cancer in Chinese women: large study in Jiexiu, Shanxi Province, China. *Journal of Cancer* 2017;8(6):924-932.

PUBLICATIONS

Tao X, Zheng B, Yin F, Zeng Z, Luo B, Li Z, Zhou X, **Zhao C** (corresponding). PCR Human Papilloma-virus Detection and HPV Genotyping in Invasive Cervical Cancers with Prior Negative HC2 Test Results, *Am J Clin Pathol*, Am J Clin Pathol. 2017;147(5):477-483.

Zhao C, Crothers BA, Ghofrani, M, Li Z, Souers, RJ, Mojtaba Hussain, M, Fan F, Tolgay Ocal I, Davey DD. False Negative Interpretation of Adenocarcinoma in Situ in the College of American Pathologists Gynecologic PAP Education Program. *Arch Pathol Lab Med*, Arch Pathol Lab Med. 2017;141(5):666-670.

Vinayak R, Cruz RJ Jr, **Ranganathan S**, Mohanka R, Mazariegos G, Soltys K, Bond G, Tadros S, Humar A, Marsh JW, Selby RR, Reyes J, Haberman K, Sindhi R. Pediatric liver transplantation for hepatocellular cancer and rare liver malignancies: US multi- and single-center experience (1981-2015). *Liver Transpl*. 2017 Aug 17. doi: 10.1002/lt.24847. [Epub ahead of print] PubMed PMID: 28834194.

Jackson LE, Kulkarni S, Wang H, Lu J, Dolezal JM, Bharathi SS, **Ranganathan S**, Patel MS, Deshpande R, Alencastro F, Wendell SG, Goetzman ES, Duncan AW, Prochownik EV. Genetic dissociation of glycolysis and the TCA cycle affects neither normal nor neoplastic proliferation. *Cancer Res*. 2017 Sep 7. pii: canres.1325.2017. doi: 10.1158/0008-5472.CAN-17-1325. [Epub ahead of print] PubMed PMID: 28883002.

O'Neill AF, Towbin AJ, Krailo MD, Xia C, Gao Y, McCarville MB, Meyers RL, McGahren ED, Tiao GM, Dunn SP, Langham MR Jr, Weldon CB, Finegold MJ, **Ranganathan S**, Furman WL, Malogolowkin M, Rodriguez-Galindo C, Katzenstein HM. Characterization of Pulmonary Metastases in Children With Hepatoblastoma Treated on Children's Oncology Group Protocol AHEP0731 (The Treatment of Children With All Stages of Hepatoblastoma): A Report From the Children's Oncology Group. *J Clin Oncol*. 2017 Sep 11;JCO2017735654. doi: 10.1200/JCO.2017.73.5654. [Epub ahead of print] PubMed PMID: 28892430.

Clark BZ, Yoest JM, Onisko A, Dabbs DJ. Effects of Hydrochloric Acid and Formic Acid Decalcification on Breast Tumor Biomarkers and HER2 Fluorescence In Situ Hybridization. *Applied Immunohistochemistry & Molecular Morphology*. 2017 epub ahead of print. Sep 29.

Yoest JM. Clinical features, predictive correlates, and pathophysiology of immune-related adverse events in immune checkpoint inhibitor treatments in cancer: a short review. *ImmunoTargets and Therapy*. 2017; (6):73-82.

Mitchell, E.L. & Khan, Z. Liver Disease in Alpha-1 Antitrypsin Deficiency: Current Approaches and Future Directions. *Curr. Pathobiol. Rep.* (2017). doi:10.1007/s40139-017-0147-5

PUBLICATIONS

Malapelle U, Mayo-de-Las-Casas C, Molina-Vila MA, Rosell R, Savic S, Bihl M, Bubendorf L, Salto-Tellez M, de Biase D, Tallini G, Hwang DH, Sholl LM, Luthra R, Weynand B, Vander Borgh S, Missiaglia E, Bongiovanni M, Stieber D, Vielh P, Schmitt F, Rappa A, Barberis M, Pepe F, Pisapia P, Serra N, Vigliar E, Bellevicine C, Fassan M, Rugge M, de Andrea CE, Lozano MD, Basolo F, Fontanini G, **Nikiforov YE**, Kamel-Reid S, da Cunha Santos G, Nikiforova MN, Roy-Chowdhuri S, Troncone G; Consistency and reproducibility of next-generation sequencing and other multigene mutational assays: A worldwide ring trial study on quantitative cytological molecular reference specimens. Molecular Cytopathology Meeting Group; *Cancer*. 2017 Aug; 125(8):615-626.

Nikiforov YE. Role of Molecular Markers in Thyroid Nodule Management: Then and Now. *Endocr Pract*. 2017 Aug;23(8):979-988. Review.

Ohori NP, Wolfe J, Carty SE, Yip L, LeBeau SO, Berg AN, Schoedel KE, **Nikiforov YE**, Seethala RR. The influence of the noninvasive follicular thyroid neoplasm with papillary-like nuclear features (NIFTP) resection diagnosis on the false-positive thyroid cytology rate relates to quality assurance thresholds and the application of NIFTP criteria. *Cancer*. Sep;125(9):692-700.

Hernandez-Prera J, Machado R, Asa SL, Baloch ZW, Faquin WC, Ghossein R Md, LiVolsi VA, Lloyd RV, Mete O, **Nikiforov YE**, Seethala R, Suster S, Thompson LDR, Turk A, Sadow PM, Urken ML, Wenig BM. Pathologic reporting of Tall Cell Variant of Papillary Thyroid Cancer: Have we reached a consensus? *Thyroid*. 2017 Oct 12. [Epub ahead of print].

Singhi AD, McGrath K, Brand RE, Khalid A, Zeh HJ, Chennat JS, Fasanella KE, Papachristou GI, Slivka A, Bartlett DL, Dasyam AK, Hogg M, Lee KK, Marsh JW, Monaco SE, Ohori NP, Pingpank JF, Tsung A, Zureikat AH, Wald AI, **Nikiforova MN**. Preoperative next-generation sequencing of pancreatic cyst fluid is highly accurate in cyst classification and detection of advanced neoplasia. *Gut*. 2017 Sep 28. pii: gutjnl-2016-313586.

Singhi AD, Arnold CA, Lam-Himlin DM, **Nikiforova MN**, Voltaggio L, Canto MI, McGrath KM, Montgomery EA. Targeted next-generation sequencing supports epidermoid metaplasia of the esophagus as a precursor to esophageal squamous neoplasia. *Mod Pathol*. 2017 Jul 21.

Roy S, Pradhan D, Ernst WL, Mercurio S, Najjar Y, Parikh R, Parwani AV, Pai RK, Dhir R, **Nikiforova MN**. Next-generation sequencing-based molecular characterization of primary urinary bladder adenocarcinoma. *Mod Pathol*. 2017 Aug;30(8):1133-1143.

Late graft dysfunction after pediatric heart transplantation is associated with fibrosis and microvasculopathy by automated, digital whole-slide analysis. Feingold B, Picarsic J, Lesniak A, Popp BA, Wood-Trageser MA, Demetris AJ. *J Heart Lung Transplant*. 2017 Sep 29. PMID: 29055602

PUBLICATIONS

T Das Banerjee, RY Dagda, M Dagda, **CT Chu**, E Vasquez-Mayorga, M Rice, RK Dagda. (2017) PINK1 regulates mitochondrial trafficking in dendrites of cortical neurons through mitochondrial PKA *J Neurochem* in press. DOI: 10.1111/jnc.14083. PMID: 28556983

M Verma, J Callio, PA Otero, I Sekler, ZP Wills & **CT Chu**. (2017) Mitochondrial calcium dysregulation contributes to dendrite degeneration mediated by PD/LBD-associated LRRK2 mutants. *J. Neurosci* in press.

Rausch JL, Boichuk S, Ali AA, Patil SS, Liu L, Lee DM, Brown MF, Makielski KR, Liu Y, Taguchi T, Kuan SF, **Duensing A**. Opposing roles of KIT and ABL1 in the therapeutic response of gastrointestinal stromal tumor (GIST) cells to imatinib mesylate. *Oncotarget* 2017; 8:4471-4483.

Nientiedt C, Heller M, Endris V, Volckmar AL, Zschäbitz S, Tapia-Laliena MA, **Duensing A**, Jäger D, Schirmacher P, Sülthmann H, Stenzinger A, Hohenfellner M, Grulich C, Duensing S. Mutations in BRCA2 and taxane resistance in prostate cancer. *Sci. Rep.* 2017; 7:4574.

Palmer OMP, Carter M, Chang CC, Lucko N, Jackson VM, Sun Q, Xie X, Scott M, Kellum JA, Venkat A, Yende S. Effects of Transport Temperature on the Stability of Inflammatory, Hemostasis, Endothelial Function, and Oxidative Stress Plasma Biomarker Concentrations. *Shock* 47:715–719. doi: 10.1097/SHK.0000000000000805.

Huang DT, Angus DC, Chang CCH, Doi Y, Fine MJ, Kellum JA, **Peck-Palmer OM**, Pike F, Weissfeld LA, Yabes J, Yealy DM. Design and rationale of the Procalcitonin Antibiotic Consensus Trial (ProACT), a multicenter randomized trial of procalcitonin antibiotic guidance in lower respiratory tract infection. *BMC Emergency Medicine* 17:25, 2017. doi:10.1186/s12873-017-0138-1.

Genzen JR, Burnham CD, Felder RA, Hawker CD, Lippi G, **Peck Palmer OM**. Challenges and Opportunities in Implementing Total Laboratory Automation. *Clin Chem* 64:2, 2017. doi:10.1373/clinchem.2017.274068

Peck Palmer OM, Clermont G, Rogers G, Yende S, Angus DC, Langston MA. Graph theoretical analysis of genome-scale data: Examination of gene activation occurring in the setting of community-acquired pneumonia. *Shock (Accepted 2017)*.

PRESENTATIONS

Dr. Marshall Austin was an invited speaker for two platform presentations at the annual Eurogin2017 October meeting in Amsterdam, Holland. Primary HPV Testing vs. Co-testing- A Debate Triaging of HPV positive women- finding the best strategies: Advantages of Microscopic Triage.

Charleen Chu, M.D., Ph.D.

An unsuspected finding (primary synovial sarcoma) in a blind painful eye. September 8, 2017, Eastern Ophthalmic Pathology Society Annual Meeting, Cleveland, OH.

Mitochondrial Mechanisms in Parkinson's Disease: Mitophagy and beyond, September 28, 2017. Grand Challenges in Parkinson's Disease Symposium. Van Andel Institute, Grand Rapids, MI.

Mitochondrial calcium dysregulation in neurodegeneration. October 6, 2017, 7th Regional Meeting of Translational Research on Mitochondria Aging and Disease (TriMAD), Pittsburgh, PA.

George K. Michalopoulos, M.D., Ph.D. Keynote speaker for European Society of Pathology, 29th European Congress of Pathology, Amsterdam, the Netherlands, September 6, 2017.

Jeffrey Nine, M.D.

Hospital-wide Grand Rounds, UPMC St. Margaret, August 2017

UPMC Critical Care Symposium, April 2017

Marina Nikiforova, M.D.

"Targeted NGS for Cancer Diagnosis in Thyroid Nodules: Big Power, Small Package", invited speaker, Brigham & Women's Hospital, Harvard School of Medicine, Cambridge, MA. May, 2017.

"Analytical Performance of The ThyroSeq v3 Genomic Classifier for Cancer Diagnosis in Thyroid Nodules". 87th Annual Meeting of the American Thyroid Association, Victoria, BC, October, 2017.

Jennifer Picarsic, M.D.

Abstract and Platform Presentations given by Oscar Lopez PGY-2:

Abstract entitled: "Diagnostic Value of PLAG1 Assessment in Lipoblastomas and Pediatric Lipomatous Tumors: Comparison of PLAG1 FISH and Immunohistochemistry at 2017 Fall Society for Pediatric Pathology (SPP) in Denver Colorado Sept 8 2017 Oscar Lopez-Nunez, Rita Alaggio, Sarangarajan Ranganathan, Lori Schmitt, Jennifer Picarsic.

Uma Rao, M.D. Invited guest speaker at UC Davis Sacramento Ca pathology and Laboratory medicine . Slide seminar and lecture on updates in soft tissue tumors Diagnostic Symposium Bone and Soft tissue tumors Thursday 28 September 2017.

Drs. Chengquan Zhao, Marshall Austin. Attended the KingMed-UPMC telepathology case discussion onsite in 3rd Digital pathology Congress: Asia Pacific, held in Guangzhou, China, on September 16-17, 2017.

Drs. Yen-Chun Liu, Nathanael G. Bailey, Douglas J. Hartman, Huina Zhang, and Chengquan Zhao, attended the Chinese second national digital pathology competition organized by Shang Cancer hospital, Kingmed Diagnostic and UPMC. UPMC side presents three challenging surgical cases. Dr. Liu and Bailey have attended the tele-conference for the case discussion on September 20, and Dr. Zhao will attend the final competition onsite on 10/28/2017 in 2017 Chinese Annual Pathology meeting.

PRESENTATIONS

Yuri Nikiforov, M.D., Ph.D.

World Congress on Thyroid Cancer, Invited Speaker. “SMouse model of poorly differentiated thyroid cancer driven by STRN-ALK fusion” and “Pre-operative risk stratification of thyroid cancer using multi-gene ThyroSeq v2 test”, Boston, MA, July, 2017.

ThyCa: Thyroid Cancer Survivors’ Conference Invited Speaker; “Molecular Diagnostics and Prognostication in All Types of Thyroid Cancer: What the Latest Research Tells Us.” Baltimore, MD, October, 2017.

University of Wisconsin Dept of Pathology and Laboratory Medicine Grand Grounds Invited Speaker; “Detection and functional characterization of ALK and THADA fusions in thyroid cancer”, Madison, WI, October, 2017.

University of Wisconsin Dept of Endocrinology Grand Grounds Invited Speaker; “Impact of molecular testing on management of patients with thyroid nodules and cancer”, Madison, WI, October, 2017.

87th Annual Meeting of the American Thyroid Association, Invited Speaker; “Results of the Multi-Institutional prospective double blind study of ThyroSeq V3® performance in thyroid nodules with indeterminate cytology”, “Cancers that are not Cancers (NIFTP)” and “Clinical Validation of ThyroSeq V3® Performance in Thyroid Nodules with Indeterminate Cytology: A Prospective Blinded Multi-Institutional Validation Study”. Recipient of the Sidney H. Ingbar Distinguished Lectureship Award “Genomic Evolution of Thyroid Nodules and Cancer – New Answers to Old Questions”, Victoria, BC Canada, October, 2017.

Parmjeet Randhawa, M.D.

Is it BK or Rejection: can your friendly neighborhood pathologist help? Non-invasive and traditional pathology approaches. American Transplant Congress, Chicago, IL, May 2, 2017.

Antigen-Specificity of T cell Infiltrates in Biopsies with T cell Mediated Rejection and BK Polyomavirus Viremia: Analysis By Next Generation Sequencing. American Society of Transplantation, Journal Club, Webinar format, May 24, 2017.

Management of BKV nephropathy; Current Recommendations. The Transplantation Society Infectious Disease Conference, Montevideo, Uruguay, September 2, 2017.

Role of T-cell mediated rejection in liver allograft pathology. Medanta Pathoconference, Medanta Hospital, The Medicity, Gurgaon, India, October 8th, 2017.

Wednesday, November 1, 2017 - 12:00 - 1:00 p.m.

1104 Scaife Hall

"Nature and Nurture: Accounting for Gene-Tissue Micro-Environment Interactions in Skin Fibrosis"

Cecelia C. Yates, Ph.D.

Assistant Professor of Nursing and Pathology
McGowan Institute for Regenerative Medicine
University of Pittsburgh

Wednesday, November 8, 2017 - 12:00 - 1:00 p.m.

Annual Totten Lecture

1104 Scaife Hall

"Mantle Cell Lymphoma, From the Microscope to the Genomes and Back"

Elias Campo, M.D., Ph.D.

Senior Consultant and Professor of Pathology
Hospital Clinic of Barcelona
University of Barcelona
Barcelona Spain

Wednesday, November 29, 2017 12:00 - 1:00 p.m.

1104 Scaife Hall

"NRF2 - Notch Interplay: Friends or Foes?"

Thomas W. Kensler, Ph.D.

Professor of Pharmacology and Chemical Biology
Department of Pharmacology and Chemical Biology
University of Pittsburgh

Wednesday, December 6, 2017 - 12:00 - 12:30 p.m.

1104 Scaife Hall

"Role of Cellular Senescence in Intervertebral Disc Degeneration"

Prashanti Patil

CMP Graduate Student
Department of Pathology

12:30 - 1:00 p.m.

"Paracrin WNT Signaling Regulates Hepatocyte β -catenin In Metabolic Zonation and Liver Regeneration"

Morgan Preziosi

CMP Graduate Student
Department of Pathology

***Wednesday, December 13, 2017 - 12:00 - 1:00 p.m.**

1104 Scaife Hall

"Inflammation and Cell Death in Alcoholic Liver Disease"

Laura E. Nagy, Ph.D.

Professor, Molecular Medicine
Staff Pathobiology
Cleveland Clinic

OUR UNITED WAY AT WORK



Help Children Succeed
Help Seniors Live Safely in their Homes
Support those with Disabilities
Help with Basic Needs

Our goal is to reach 50% participation level in the Department. www.uwsdpa.org

CME Credit Update

The University of Pittsburgh School of Medicine, Center for Continuing Education for the Health Sciences CME transcripts can be obtained via the Internet at ccehs.upmc.edu. Click on link "Credit Transcripts" enter the required information (last name, last five digits of social security number). The transcript reflects the American Medical Association Category 1 credits or the Continuing Education Units (CEUs) which have been entered into the Center's database. Credits from other institutions can be entered using the option "add/modify" credit information. For questions about the Continuing Medical Education Credits, please contact 412.647.8232.

Educational Credit Unit Update

Just a reminder that the Educational Credit Units (ECUs) are being collected from every faculty member who has been involved with teaching activities for the medical or graduate school programs from **July 1, 2017 to June 30, 2018**. We have initiated a web-page (see directions for access to page on Page 7 to collect teaching as it happens. The School of Medicine will be asking for the information in July. If you have any questions please contact Chris Szalkuski at szalkuskict@upmc.edu.

Publication Notification Process Update

This is a reminder the Dean has requested a Notification of Publication form for each manuscript accepted for publication in a peer-reviewed journal. The notification ensures compliance with human and animal research policies, technology transfer/patent guidelines and the requirements for citation of grant support. It also allows for newsworthy publications to be passed onto the University media. Please submit preprint information via the website at: <https://pnf.hs.pitt.edu>. If you have any questions, please contact Chris Szalkuski at szalkuskict@upmc.edu.

Veteran's Day Saturday, November 11, 2017

The University of Pittsburgh has an exhibit at the Hillman Library, Ground floor entrance on Wednesday, November 8 from 10-12 to honor the Veterans.

