Curriculum vitae
Payal Kapur, MD
Professor of Pathology and Urology

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Place of Birth:	India

Education

Year	Degree	Field of Study	Institution
1996-97	Internship	Medicine	University College of Medical Sciences, New Delhi, India
1991-96	M.B.B.S	Medicine	University College of Medical Sciences, New Delhi, India
1989-91	High School	Science	Delhi Public School, New Delhi, India

Postdoctoral Training

Year(s)	Titles	Specialty/Discipline	Institution
2002-06	Residency	Anatomic and Clinical Pathology	University of Texas Southwestern Medical Center, Dallas
1997-00	Residency	Pathology	Maulana Azad Medical College, New Delhi, India

Current Licensure and Certification

Licensure
Physician License, Texas
Registered Medical Practitioner, Medical Council of India

Board and Other Certification
Anatomic Pathology and Clinical Pathology, American Board of Pathology MOC, 10/11/2016
Anatomic Pathology, American Board of Pathology, 11/29/2006
Clinical Pathology, American Board of Pathology, 11/29/2006
Doctor of Medicine, Pathology, Delhi University, 07/04/2000
Educational Commission for Foreign Medical Graduates Certification, 11/20/2001
Bachelor of Medicine and Bachelor of Surgery, University College of Medical Sciences, 04/29/1997

Honors and Awards

Year	Name of Honor/Award	Awarding Organization
2018	Resident/fellow research award	2nd Annual KCP Retreat, UT Southwestern Medical Center, Dallas, TX
2016	LEAD Capstone Project Capstone Finalist	Leadership Emerging In Academic Departments, UT Southwestern Medical Center, Dallas, TX
2011	Vernie A. Stembridge, M.D. Resident Teaching Award	UT Southwestern Medical Center Dallas, TX
2010	Vernie A. Stembridge, M.D. Resident Teaching Award	UT Southwestern Medical Center Dallas, TX
2007	Second place winner for the article "Acute-onset, bilateral lower extremity pain in a 30-year-old man" (Lab Med 2006; 37(9): 533-535)	Lab Medicine Case Study Competition, 2006
2006	Small Group Teaching Award, Pathology Sophomore Curriculum	UT Southwestern Medical Center Dallas, TX
2006	Second place in poster competition for the poster "Effect of fixatives on nuclear proteomic analyses using 2-d protein electrophoresis".	Texas Society of Pathologists Annual Meeting of the Texas Society of Pathologists, Dallas, TX, January 2006
2004	Resident's Case Presentation Award, for the essay entitled "Mosaic variegated aneuploidy: a case report"	Society for Pediatric Pathology
2002	Gordon L. Vawter Pathologist-in-training Award for platform presentation entitled "MIB-1 Labeling Index predicts progression free survival in a large group of pediatric pilocytic astrocytomas".	The Society for Pediatric Pathology Interim Meeting, Dallas, TX, September 2002
2000	Dr. R.P. Mathur Memorial Award for the best outgoing pathology resident	Maulana Azad Medical College, Delhi University, New Delhi, India
1993	Best speaker in a Physiology seminar on respiratory and special organ systems	University College of Medical Sciences, New Delhi, India
1992	National Scholarship for being among top 1% of students from all over India	Government of India

Faculty Academic Appointments

Year(s)	Academic Title	Department	Academic Institution
2019-	Fellowship Director, Genitourinary Pathology, UTSW	Pathology	UT Southwestern Medical Center
2019-	Jan and Bob Pickens Distinguished Professorship in Medical Science	Pathology	UT Southwestern Medical Center

2019-	Brock Fund for Medical Science Chair in Pathology	Pathology	UT Southwestern Medical Center
2019-	Director, Clinical Research affairs, Anatomic Pathology	Pathology	UT Southwestern Medical Center
2018-Current	Professor	Pathology and Urology	UT Southwestern Medical Center
2013-Current	Co-Leader, Kidney Cancer Program	Simmons Cancer Center	UT Southwestern Medical Center
2013-2015	Medical Director	Surgical Pathology, Parkland Memorial Hospital	UT Southwestern Medical Center
2012-Current	Group Leader, Genitourinary Pathology	Pathology	UT Southwestern Medical Center
2012-Current	Associate Professor	Pathology and Urology	UT Southwestern Medical Center
2010-2013	Assistant Program Director	Anatomical Pathology Resident Education	UT Southwestern Medical Center
2008-2013	Co-Director, Tissue Management Shared Resource (UTSTR)	Simmons Cancer Center	UT Southwestern Medical Center
2006-2012	Assistant Professor	Pathology	UT Southwestern Medical Center

Appointments at Hospitals/Affiliated Institutions

Past			
Year(s)	Position Title	Department/Division	Institution
2013-2015	Medical Director	Surgical Pathology, Parkland Memorial Hospital	UT Southwestern Medical Center
2010-2012	Assistant Professor	Urology	UT Southwestern Medical Center and affiliated hospitals
2006-2012	Assistant Professor	Pathology	UT Southwestern Medical Center and affiliated hospitals
Current			
Year(s)	Position Title	Department/Division	Institution
2012-Current	Associate Professor	Pathology	UT Southwestern Medical Center and affiliated hospitals
2012-Current	Associate Professor	Urology	UT Southwestern Medical Center and affiliated hospitals

Other Professional Positions

Year(s)	Position Title	Institution
2001-2002	Research Technician	Children's Medical Center

Major Administrative/Leadership Positions

Year(s)	Position Title	Institution

2022-	Scientific Director, Immune Monitoring Core	Simmons Comprehensive Cancer Center (SCCC)
2019-	Fellowship Director, Genitourinary Pathology, UTSW	Pathology
2019-	Director, Clinical Research affairs, Anatomic Pathology	Pathology
2016-current	Renal Cancer Task Force Member	Genitourinary Steering Committee (GUSC), National Cancer Institute
2016	Leadership Emerging In Academic Departments Program, 2016	UT Southwestern Medical Center
2013-Current	Co-Leader, Kidney Cancer Program	Simmons Cancer Center
2012-Current	Group Leader, Genitourinary Pathology	UT Southwestern Medical Center
2013-2015	Medical Director, Surgical Pathology	Parkland Health & Hospital System
2010-2013	Assistant Director, Anatomical Pathology Resident Education	UT Southwestern Medical Center
2008-2013	Co-Director, Tissue Management Shared Resource (UTSTR)	Simmons Comprehensive Cancer Center (SCCC)
2007-2013	Director, Anatomical Pathology Guest Speaker Seminar Series	UT Southwestern Medical Center
2007-2013	Director, Philip O'Brien Montgomery Visiting Lectureship Seminar	UT Southwestern Medical Center

Committee Service

Year(s)	Name of Committee	Institution/Organization
UTSW		
2013-Current	Kidney Cancer Program	Simmons Cancer Center
2012-Current	Best Practices, Pathology	UT Southwestern Medical Center
2013-2015	Parkland Cancer Committee	Parkland Health & Hospital System
2014-2015	Physician Leadership Subcommittee	Parkland Health & Hospital System
2007-2009	Tissue Resource for Melanoma Research Study	UT Southwestern Medical Center
2013-Current	Thesis committee member	University of Texas Southwestern Medical Center/ UT Arlington
Hospital		
2010-Current	Urology Grand Rounds, Pathology Presenter	UT Southwestern Medical Center
2010-Current	Renal Cell Carcinoma Grand Rounds, Pathology Presenter	UT Southwestern Medical Center
2013-2015	Soft Tissue, Disease Oriented Tumor board, Pathology Presenter	UT Southwestern Medical Center
2011-2012	Pediatric and Young Adult GU Oncology Conference, Pathology Presenter	UT Southwestern Medical Center
2008-2011	Thyroid Grand Rounds, Pathology Co-Presenter	UT Southwestern Medical Center
National/International		

Professional Societies

Dates	Society Name, member
2012-Current	International Society of Urologic Pathologists
2010-2015	United Sates and Canadian Academy of Pathology, UTSW Ambassador
2009-2011	College of American Pathologists
2009-2011	American Society of Cytopathology
2002-2006	American Society for Clinical Pathology
2002-2006	Texas Society of Pathologists
2000-2014	North Texas Society of Pathologists, Treasurer, Secretary, vice President, President
	Committees
	Fellowships
2015	Genitourinary Pathology training, Lead GU pathologist

Grant Review Activities

Year(s)	Name of Review Committee	Organization
2014	Kidney Cancer Program, Career Development Program Award (Kidney Cancer SPORE)	UT Southwestern Medical Center

Editorial Activities

Year(s)	Journal Name
Ad Hoc Reviewer	
2013-	Histopathology
2013-	Oncotarget
2010-	Reviewer, Histology and Histopathology
2010-	Reviewer, Laboratory Investigation
2013-	Expert Review of Molecular Diagnostics
2013-	Modern Pathology
2014-	PLOS ONE
2014-	Clinical Cancer Research (CCR)
2014-	BioMed Center

Invited Lectures [*Since last promotion/appointment*]

Year(s)	Title	Locatio

International		
Jan 2022	Kidney Cancer and its metabolic correlates-through the lens of a pathologist	Simmons Cancer Center, Metabolic Seminar Series, Dallas, Texas (Virtual)
Feb 2022	Clinical trials in UTSW Kidney Cancer SPORE	Annual NIH-GUSC meeting, San Francisco, CA (Virtual)
Feb 2022	Best of Journal –Renal cell carcinoma	ASCO Genitourinary Cancers Symposium, San Francisco, (Virtual)
Sept-2021	Defining RCC subtypes using genomic alterations	AUA annual meeting, Las Vegas, NM (Virtual)
Sept 2019	Chairing sessions, Single Cell Sequencing Strategies in Kidney Cancer	Kidney Cancer Research Summit (KidneyCAN), Philadelphia
Nov 2017	In Vivo Models of Renal Cell Carcinoma	Fifteenth International Kidney Cancer Association (KCA) Symposium, Miami, Florida
Nov 2017	Optimal Models for Renal Cell Carcinoma Research Panel	Fifteenth International Kidney Cancer Association (KCA) Symposium, Miami, Florida
Aug 2017	Kidney Cancer Research Program Stakeholders meeting	Department of Defense Kidney Cancer Research Program (KCRP), Herndon, Virginia
Nov 2016	Novel HIF2 inhibitors in Renal Cancer	9th European Scientific Oncology Conference (ESOC 9), Marbella, Spain
Oct 2016	Updates in Renal Cell Carcinoma: Molecular Genetic Classification	6th annual international meeting titled "NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT 2016), Cochin, India
Oct 2016	Chairing sessions, Cancer biology and Therapy	6th annual international meeting titled "NextGen Genomics, Biology,

		Bioinformatics and Technologies (NGBT 2016), India Cochin
Nov 2015	Chromophobe RCC: TCGA and Other Updates	Thirteenth International Kidney Cancer Association (KCA) Symposium Miami, Florida
National		
Feb 2019	Prostate Cancer: Modified Gleason Grading	Presbyterian Medical Center
Jul 2015	Updates in Renal Cell Carcinoma Pathology	Genentech San Francisco, California
Nov 2015	Updates in Renal Cell carcinoma: Molecular genetic Classification	Department of Pathology, University of Iowa Hospitals and Clinic, Iowa city, Iowa
Oct 2013	Prostate Carcinoma Pathology	Urology Symposium, UT Southwestern, Dallas, Texas
April 2013	Prostate Carcinoma: challenges in everyday practice	Current Issues in Surgical Pathology (CISP), Dallas Texas
Oct 2012	Pathology of Prostate Gland: the art of making a diagnosis	Society of Urologic Nurses and Associates (SUNA), Fort Worth, Texas
Regional/Local		
March 2019	Kidney Cancer Medical Intelligence Enterprise with 2000 patients	Kidney Cancer Program, Molecular Retreat with Genentech, Simmons Cancer Center, Dallas, Texas
March 2019	Morphology- an untapped resource	Kidney Cancer Program, Molecular Retreat with Genentech, Simmons Cancer Center, Dallas, Texas
March 2019	Kidney Cancer Program Resources	Kidney Cancer Program, Molecular Retreat with Genentech, Simmons Cancer Center, Dallas, Texas
April 2019	Kidney Cancer Explorer and further	Kidney Cancer Program, Molecular Retreat with Cleveland Clinic, Simmons Cancer Center, Dallas, Texas
April 2019	Biomarkers of anti-angiogenesis response	Kidney Cancer Program, Molecular Retreat with Cleveland Clinic, Simmons Cancer Center, Dallas, Texas
April 2019	Kidney Cancer Program Resources	Kidney Cancer Program, Molecular Retreat with Cleveland Clinic, Simmons Cancer Center, Dallas, Texas
Dec 2019	Kidney Cancer Program Resources	Kidney Cancer Program Trainee Retreat, Simmons Cancer Center, Dallas, Texas
Sept 2019	Case Presentation	Kidney Cancer Program Annual Event, Simmons Cancer Center, Dallas, Texas
Sept 2019	Role of pathology and biomarker development, breakout sessions	Kidney Cancer Program Annual Event, Simmons Cancer Center, Dallas, Texas
Nov 2019	SPORE Core B: Infrastructure and Progress	Kidney Cancer Program 2nd IAB meeting, Simmons Cancer Center, Dallas, Texas

Nov 2019	SPORE Project 2 Progress: Evaluation of the functional and clinical significance of the novel ccRCC tumor suppressor BAP1	Kidney Cancer Program IAB meeting, Simmons Cancer Center, Dallas, Texas
Dec 2019	Tumor Heterogeneity and Digital Pathology	Kidney Cancer Program, BOLD, Simmons Cancer Center, Dallas, Texas
Nov 2018	SPORE Project 2 Progress: Evaluation of the functional and clinical significance of the novel ccRCC tumor suppressor BAP1	Kidney Cancer Program, Research Conference Simmons Cancer Center, Dallas, Texas
2108	Kidney Cancer Medical Intelligence Enterprise	Kidney Cancer Program Trainee Retreat, Simmons Cancer Center, Dallas, Texas
2018	Kidney Cancer Program Resources	Kidney Cancer Program Trainee Retreat, Simmons Cancer Center, Dallas, Texas
2018	Case Presentation	Kidney Cancer Program Annual Event, Simmons Cancer Center, Dallas, Texas
2018	Genetic classification of ccRCC	Kidney Cancer Program Rerearch meeting, Simmons Cancer Center, Dallas, Texas
2018	SPORE Core B: Instrstructure and Progress	Kidney Cancer Program 2nd IAB meeting, Simmons Cancer Center, Dallas, Texas
2018	SPORE Project 2 Progress: Evaluation of the functional and clinical significance of the novel ccRCC tumor suppressor BAP1	Kidney Cancer Program IAB meeting, Simmons Cancer Center, Dallas, Texas
2018	Pathology and Genetic classification of Renal Cancer	Kidney Cancer Program IAB meeting, Simmons Cancer Center, Dallas, Texas
2018	Tumor Heterogeneity and Digital Pathology	Kidney Cancer Program Genomic Retreat, Simmons Cancer Center, Dallas, Texas
2018	Kidney Cancer Explorer	Kidney Cancer Program Genomic Retreat, Simmons Cancer Center, Dallas, Texas
2018	Resources in Pathology Core and Kidney Cancer Program	Kidney Cancer Program Genomic Retreat, Simmons Cancer Center, Dallas, Texas
2017	Kidney Cancer Explorer-online portal for RCC research	Faculty Work in Progress Seminar (WIPS), UT Southwestern Medical Center, Texas
2017	Case presentation: Kidney cancer Annual event	Simmons Cancer Center, Dallas, Texas
2017	Approach to Intraoperative diagnosis in GU pathology	Department of Pathology UT Southwestern Medical Center, Dallas Texas
2017	Kidney Cancer Explorer-Online Portal for RCC Research: update and live demo	RCC Research Conference, Simmons Cancer Center, Dallas, Texas

2017	Team Science Panel Discussion	Center for Translational Science Research Day, Simmons Cancer Center, Dallas, Texas
2016	Towards a molecular and functional classification of sporadic clear cell renal cell carcinoma	Kidney Cancer Program, 2nd EAB meeting, Simmons Cancer Center, Dallas, Texas
2016	UTSW Kidney Cancer Program Pathology Core	Kidney Cancer Program, 2nd EAB meeting, Simmons Cancer Center, Dallas, Texas
2016	SPORE Project 2 Progress: Evaluation of the functional and clinical significance of the novel ccRCC tumor suppressor BAP1	RCC Research Conference Simmons Cancer Center, Dallas, Texas
2016	Leadership Emerging in Academic Departments Program Capstone finalist presentation to Dean	UT Southwestern Medical Center Dallas, Texas
2016	Papillary Renal Cell Carcinoma and HLRCC: comprehensive molecular characterization	RCC Research Conference Simmons Cancer Center, Dallas, Texas
2016	Spokesperson interview (in the absence of Dr. Brugarolas) by CBS DFW and KRLD afternoon news for News release: UT Southwestern Receives $11 million Grant	http://dfw.cbslocal.com/video/3442074-ut-southwestern-receives-11-million-grant/
2016	Leadership Emerging in Academic Departments Program Capstone presentation	UT Southwestern Medical Center Dallas, Texas
2016	Kidney Cancer Explorer: A Database Linking Clinical Information, Genomics, and Patient Samples-Progress	RCC Research Conference Simmons Cancer Center, Dallas, Texas
2015	The International Society of Urological Pathology (ISUP) Vancouver Classification of Renal Neoplasia	RCC Research Conference Simmons Cancer Center, Dallas, Texas
2015	Pathology and Genetic classification of Renal Cancer	Patient tour through Brugarolas Lab, Simmons Cancer Center, Dallas, Texas
2014	UTSW Kidney Cancer Program Pathology Core	Kidney Cancer Program, 1st EAB meeting, Simmons Cancer Center, Dallas, Texas
2014	Targeting Novel Biomarkers in Renal Cancer Therapeutics and Prognostics	Physician Scientist Meeting Simmons Cancer Center, Dallas, Texas
2014	Kidney Cancer Explorer: A Database Linking Clinical Information, Genomics, and Patient Samples	RCC Research Conference Simmons Cancer Center, Dallas, Texas
2014	Molecular Classification in Renal Cell Carcinoma	Faculty Work in Progress Seminar (WIPS), UT Southwestern Medical Center, Texas
2014	BAP1 & PBRM1 underlie the first molecular genetic classification of Clear Cell RCC	Kidney Cancer Program retreat, Simmons Cancer Center, Dallas, Texas
2014	EZH2 a determinant of aggressiveness and drug target in renal cancer	Kidney Cancer Program retreat, Simmons Cancer Center, Dallas, Texas
2014	Pathology Core Resources	Kidney Cancer Program retreat, Simmons Cancer Center, Dallas, Texas

2013	Role of EZH2 in Renal Cell Carcinoma	Brugarolas Lab meeting, Simmons Cancer Center, Dallas, Texas
2013	Pathology and Genetic classification of Renal Cancer	Kidney Cancer Program Inauguration, Simmons Cancer Center, Dallas, Texas
2013	Renal Cell Carcinoma: A Work in Progress	Faculty Work in Progress Seminar (WIPS), UT Southwestern Medical Center, Dallas, Texas
2012	Pathology and Genetic classification of Renal Cancer	Patient tour through Brugarolas Lab, Simmons Cancer Center, Dallas, Texas
2012	Interesting Cases in Soft Tissue Pathology	Department of Surgery, UT Southwestern Medical Center, Dallas, Texas

Technological and Other Scientific Innovations

Development of the Kidney cancer Explorer (kce.swmed.edu)

Service to the Community

Year(s)	Role	Organization or institution
2015	Co-leader of Kidney Cancer Program	UT Southwestern Medical Center
I have been involved with the development of Kidney Cancer Explorer (KCE), a powerful informatics system that integrates up-to-date clinical-pathological data with high-dimensional genomics and research samples into a unified database that supports powerful analytical tools for integrative studies. (kce.swmed.edu)		

Bibliography

Peer-Reviewed Publications

Original Research Articles

1.	Bowers DC, Gargan L, **Kapur P**, Reisch JS, Mulne AF, Shapiro KN, Elterman RD, Winick NJ, Margraf LR. Study of the MIB-1 labeling index as a predictor of tumor progression in pilocytic astrocytomas in children and adolescents. **J Clin Oncol**. 2003 Aug 1;21(15):2968-73. PubMed PMID: 12885817.
2.	Mejías A, Chávez-Bueno S, Ríos AM, Saavedra-Lozano J, Fonseca Aten M, Hatfield J, **Kapur P**, Gómez AM, Jafri HS, Ramilo O. Anti-respiratory syncytial virus (RSV) neutralizing antibody decreases lung inflammation, airway obstruction, and airway hyperresponsiveness in a murine RSV model. **Antimicrob Agents Chemother**. 2004 May;48(5):1811-22. PubMed PMID: 15105140; PubMed Central PMCID: PMC400529.
3.	Jafri H.S., Chavez-Bueno S., Mejias A., Gomez A.M., Rios A.M., Nassi S.S., Yusuf M., **Kapur P**., Hardy R.D., Hatfield J., Rogers B.B., Krisher K., Ramilo O. Respiratory syncytial virus induces

	pneumonia, cytokine response, airway obstruction, and chronic inflammatory infiltrates associated with long-term airway hyperresponsiveness in mice. **J Infect Dis**. 2004 May 15;189(10):1856-65. PubMed PMID: 15122522.
4.	**Kapur P**, Selim MA, Roy LC, Yegappan M, Weinberg AG, Hoang MP. Spitz nevi and atypical Spitz nevi/tumors: a histologic and immunohistochemical analysis. **Mod Pathol**. 2005 Feb;18(2):197-204. PubMed PMID: 15467715.
5.	**Kapur P**, Rakheja D, Gomez AM, Sheffield J, Sanchez P, Rogers BB. Characterization of inflammation in syphilitic villitis and in villitis of unknown etiology. **Pediatr Dev Pathol**. 2004 Sep-Oct;7(5):453-8; discussion 421. Epub 2004 Jul 30. PubMed PMID: 15547769.
6.	**Kapur P**, Rakheja D, Roy LC, Hoang MP. Fatty acid synthase expression in cutaneous melanocytic neoplasms. **Mod Pathol**. 2005 Aug;18(8):1107-12. PubMed PMID:15920554.
7.	Rakheja D, **Kapur P**, Hoang MP, Roy LC, Bennett MJ. Increased ratio of saturated to unsaturated C18 fatty acids in colonic adenocarcinoma: implications for cryotherapy and lipid raft function. **Med Hypotheses**. 2005;65(6):1120-3. PubMed PMID: 16084671.
8.	Rakheja D, **Kapur P**, Tomlinson GE, Margraf LR. Pediatric renal cell carcinomas with Xp11.2 rearrangements are immunoreactive for hMLH1 and hMSH2 proteins. **Pediatr Dev Pathol**. 2005 Nov-Dec;8(6):615-20. PubMed PMID:16328670.
9.	Rakheja D, Maitra A, **Kapur P**, Weinberg AG. Extrahepatic biliary atresia demonstrates abnormal persistence of HES1 protein in neonatal biliary epithelium: an immunohistochemical study. **Pediatr Dev Pathol**. 2006 Mar-Apr;9(2):98-102. PubMed PMID: 16822088.
10.	**Kapur P**, Rakheja D, Balani JP, Roy LC, Amirkhan RH, Hoang MP. Phosphorylated histone H3, Ki-67, p21, fatty acid synthase, and cleaved caspase-3 expression in benign and atypical granular cell tumors. **Arch Pathol Lab Med**. 2007 Jan;131(1):57-64. PubMed PMID: 17227124.
11.	Hoang MP, Mahalingam M, Bhawan J, **Kapur P**, High WA. Acute generalized exanthematous pustulosis: a histologic study of forty-five cases. **Malaysian Journal of Dermatology** 2008;21:23-33.
12.	Lisovsky M, Hoang MP, Dresser KA, **Kapur P**, Bhawan J, Mahalingam M. Apolipoprotein D in CD34-positive and CD34-negative cutaneous neoplasms: a useful marker in differentiating superficial acral fibromyxoma from dermatofibrosarcoma protuberans. **Mod Pathol**. 2008 Jan;21(1):31-8. Epub 2007 Sep 21. PubMed PMID:17885669.
13.	Hoang MP, Dresser KA, **Kapur P**, High WA, Mahalingam M. Microcystic adnexal carcinoma: an immunohistochemical reappraisal. **Mod Pathol**. 2008 Feb;21(2):178-85. Epub 2007 Dec 7. PubMed PMID: 18065959.
14.	**Kapur P**, Erickson C, Rakheja D, Carder KR, Hoang MP. Congenital self-healing reticulohistiocytosis (Hashimoto-Pritzker disease): ten-year experience at Dallas Children's Medical Center. **J Am Acad Dermatol**. 2007 Feb;56(2):290-4. PubMed PMID: 17224372.
15.	**Kapur P**, Nazarian RM, Rakheja D, Piris A, Duncan LM, Mihm MC Jr, Hoang MP. Atypical and malignant hidradenomas: a histological and immunohistochemical study. **Mod Pathol**. 2009 Apr;22(4):600-10. Epub 2009 Feb 27. PubMed PMID: 19252473.
16.	Gao X, Saha D, **Kapur P**, Anthony T, Livingston EH, Huerta S. Radiosensitization of HT-29 cells and xenografts by the nitric oxide donor DETANONOate. **J Surg Oncol**. 2009 Aug 1;100(2):149-58. PubMed PMID: 19507186.
17.	Huerta S, Hrom J, Gao X, Saha D, Anthony T, Reinhart H, **Kapur P**. Tissue microarray constructs to predict a response to chemoradiation in rectal cancer. **Dig Liver Dis**. 2010 Oct;42(10):679-84. Epub 2010 Mar 15. PubMed PMID: 20227932.
18.	Huerta S, Gao X, Livingston EH, **Kapur P**, Sun H, Anthony T. In vitro and in vivo radiosensitization of colorectal cancer HT-29 cells by the smac mimetic JP-1201. **Surgery**. 2010 Aug;148(2):346-53. PubMed PMID: 20633731.
19.	Gupta S, Ashfaq R, **Kapur P**, Afonso BB, Nguyen TP, Ansari F, Boland CR, Goel A, Rockey DC. Microsatellite instability among individuals of Hispanic origin with colorectal cancer. **Cancer**. 2010 Nov 1;116(21):4965-72. PubMed PMID: 20665498; PubMed Central PMCID: PMC2963686.

20.	Khan ZS, Huth J, **Kapur P**, Huerta S. Indications and recommended approach for surgical intervention of metastatic disease to the gallbladder. **World J Surg Oncol**. 2010 Sep 10;8:80. PubMed PMID: 20828420; PubMed Central PMCID: PMC2944133.
21.	**Kapur P**, Rakheja D. Immunohistochemical expression of neural cell adhesion molecule in Wilms tumors, nephrogenic rests, and fetal and postnatal renal cortices. **Pediatr Dev Pathol**. 2011 Jan-Feb;14(1):16-9. Epub 2010 Jun 4. PubMed PMID: 20524836.
22.	Rakheja D, Boriack RL, Mitui M, Khokhar S, Holt SA, **Kapur P**. Papillary thyroid carcinoma shows elevated levels of 2-hydroxyglutarate. **Tumour Biol**. 2011 Apr;32(2):325-33. PubMed PMID: 21080253.
23.	Youssef R, **Kapur P**, Kabbani W, Shariat SF, Mosbah A, et al. Bilharzial vs non-bilharzial related bladder cancer: pathological characteristics and value of cyclooxygenase-2 expression. **BJU Int**. 2011 Jul;108(1):31-7. PubMed PMID: 21105986.
24.	Youssef RF, Shariat SF, **Kapur P**, Kabbani W, Ghoneim T, et al. Expression of cell cycle-related molecular markers in patients treated with radical cystectomy for squamous cell carcinoma of the bladder. **Hum Pathol**. 2011 Mar;42(3):347-55. PubMed PMID: 21111452.
25.	Youssef RF, Shariat SF, **Kapur P**, Kabbani W, Mosbah A, et al. Prognostic value of cyclooxygenase-2 expression in squamous cell carcinoma of the bladder. **J Urol**. 2011 Mar;185(3):1112-7. PubMed PMID: 21255800.
26.	Phadke PA, Rakheja D, Le LP, Selim MA, **Kapur P**, et al. Proliferative nodules arising within congenital melanocytic nevi: a histologic, immunohistochemical, and molecular analyses of 43 cases. **Am J Surg Pathol**. 2011 May;35(5):656-69. PubMed PMID: 21436676.
27.	**Kapur P**, Lotan Y, King E, Kabbani W, Mitra AP, Mosbah A, Abol-Enein H, Ghoneim M, Youssef RF. Primary adenocarcinoma of the urinary bladder: value of cell cycle biomarkers. **Am J Clin Pathol**. 2011 Jun;135(6):822-30. PubMed PMID: 21571954.
28.	Kucejova B, Peña-Llopis S, Yamasaki T, Sivanand S, Tran TA, Alexander S, Wolff NC, Lotan Y, Xie XJ, Kabbani W, **Kapur P**, Brugarolas J. Interplay between pVHL and mTORC1 pathways in clear-cell renal cell carcinoma. **Mol Cancer Res**. 2011 Sep;9(9):1255-65. PubMed PMID: 21798997; NIHMSID: NIHMS314874; PubMed Central PMCID: PMC3234675.
29.	Youssef R, **Kapur P**, Arendt T, Kabbani W, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y Prognostic value of apoptotic markers in squamous cell carcinoma of the bladder. **British Journal of Urology Int**. 2012 Oct;110(7):961-6. PubMed PMID: 22372762.
30.	Yang L, Ravindranathan P, Ramanan M, **Kapur P**, Hammes SR, et al. Central role for PELP1 in nonandrogenic activation of the androgen receptor in prostate cancer. **Mol Endocrinol**. 2012 Apr;26(4):550-61. PubMed PMID: 22403175; PubMed Central PMCID: PMC5417135.
31.	Sivanand S, Peña-Llopis S, Zhao H, Kucejova B, Spence P, Pavia-Jimenez A, Yamasaki T, McBride DJ, Gillen J, Wolff NC, Morlock L, Lotan Y, Raj GV, Sagalowsky A, Margulis V, Cadeddu JA, Ross MT, Bentley DR, Kabbani W, Xie XJ, **Kapur P**, Williams NS, Brugarolas J. A validated tumorgraft model reveals activity of dovitinib against renal cell carcinoma. **Sci Transl Med**. 2012 Jun 6;4(137):137ra75. PubMed PMID: 22674553; NIHMSID: NIHMS434733; PubMed Central PMCID: PMC3570965.
32.	Peña-Llopis S, Vega-Rubín-de-Celis S, Liao A, Leng N, Pavía-Jiménez A, Wang S, Yamasaki T, Zhrebker L, Sivanand S, Spence P, Kinch L, Hambuch T, Jain S, Lotan Y, Margulis V, Sagalowsky AI, Summerour PB, Kabbani W, Wong SW, Grishin N, Laurent M, Xie XJ, Haudenschild CD, Ross MT, Bentley DR, **Kapur P**, Brugarolas J. BAP1 loss defines a new class of renal cell carcinoma. **Nat Genet**. 2012 Jun 10;44(7):751-9. PubMed PMID: 22683710; NIHMSID: NIHMS377160; PubMed Central PMCID: PMC3788680.
33.	Sen A, De Castro I, Defranco DB, Deng FM, Melamed J, **Kapur P**, Raj GV, Rossi R, Hammes SR. Paxillin mediates extranuclear and intranuclear signaling in prostate cancer proliferation. **J Clin Invest**. 2012 Jul;122(7):2469-81. PubMed PMID: 22684108; PubMed Central PMCID: PMC3386821.

34.	Bagrodia A, Youssef RF, **Kapur P**, Darwish OM, Cannon C, et al. Prospective evaluation of molecular markers for the staging and prognosis of upper tract urothelial carcinoma. **Eur Urol**. 2012 Jul;62(1):e27-9. PubMed PMID: 22552216.
35.	Wu K, Gore C, Yang L, Fazli L, Gleave M, Pong RC, Xiao G, Zhang L, Yun EJ, Tseng SF, **Kapur P**, He D, Hsieh JT. Slug, a unique androgen-regulated transcription factor, coordinates androgen receptor to facilitate castration resistance in prostate cancer. **Mol Endocrinol**. 2012 Sep;26(9):1496-507. PubMed PMID: 22745193; PubMed Central PMCID: PMC5416972.
36.	Marin-Valencia I, Cho SK, Rakheja D, Hatanpaa KJ, **Kapur P**, et al. Glucose metabolism via the pentose phosphate pathway, glycolysis and Krebs cycle in an orthotopic mouse model of human brain tumors. **NMR Biomed**. 2012 Oct;25(10):1177-86. PubMed PMID: 22383401; NIHMSID: NIHMS474016; PubMed Central PMCID: PMC3670098.
37.	Youssef R, **Kapur P**, Shariat SF, Arendt T, Kabbani W, et al. Prognostic value of apoptotic markers in squamous cell carcinoma of the urinary bladder. **BJU Int**. 2012 Oct;110(7):961-6. PubMed PMID: 22372762.
38.	Tan YK, Best SL, Donnelly C, Olweny E, **Kapur P**, et al. Novel iron oxide microparticles used to render stone fragments paramagnetic: assessment of toxicity in a murine model. **J Urol**. 2012 Nov;188(5):1972-7. PubMed PMID: 22999535.
39.	Yu L, Tumati V, Tseng SF, Hsu FM, Kim DN, Hong D, Hsieh JT, Jacobs C, **Kapur P**, Saha D. DAB2IP regulates autophagy in prostate cancer in response to combined treatment of radiation and a DNA-PKcs inhibitor. **Neoplasia**. 2012 Dec;14(12):1203-12. PubMed PMID: 23308052; PubMed Central PMCID: PMC3540945.
40.	**Kapur P**, Peña-Llopis S, Christie A, Zhrebker L, Pavía-Jiménez A, et al. Effects on survival of BAP1 and PBRM1 mutations in sporadic clear-cell renal-cell carcinoma: a retrospective analysis with independent validation. **Lancet Oncol**. 2013 Feb;14(2):159-67. PubMed PMID: 23333114; NIHMSID: NIHMS559697; PubMed Central PMCID: PMC4674067.
41.	Olweny EO, **Kapur P**, Tan YK, Park SK, Adibi M, et al. Irreversible electroporation: evaluation of nonthermal and thermal ablative capabilities in the porcine kidney. **Urology.** 2013 Mar;81(3):679-84. PubMed PMID: 23290141.
42.	Darwish OM, **Kapur P**, Youssef RF, Bagrodia A, Belsante M, et al. Cumulative number of altered biomarkers in mammalian target of rapamycin pathway is an independent predictor of outcome in patients with clear cell renal cell carcinoma. **Urology**. 2013 Mar;81(3):581-6. PubMed PMID: 23290145.
43.	Hakiman H, Margulis V, **Kapur P**, Huerta S. Rapid progression of a germ cell tumor encasing the inferior vena cava and aorta following a radical orchiectomy. **Rare Tumors**. 2013 Apr 15;5(2):79-82. PubMed PMID: 23888221; PubMed Central PMCID: PMC3719116.
44.	Bagrodia A, Kuehhas FE, Gayed BA, Wood CG, Raman JD, **Kapur P**, Derweesh IH, Bensalah K, Sagalowsky AI, Shariat SF, Lotan Y, Margulis V.Comparative analysis of oncologic outcomes of partial ureterectomy vs radical nephroureterectomy in upper tract urothelial carcinoma. **Urology**. 2013 May;81(5):972-7. PubMed PMID: 23523292.
45.	Huerta S, Gao X, Dineen S, **Kapur P**, Saha D, et al. Role of p53, Bax, p21, and DNA-PKcs in radiation sensitivity of HCT-116 cells and xenografts. **Surgery**. 2013 Aug;154(2):143-51. PubMed PMID: 23889944.
46.	Chang KH, Li R, Kuri B, Lotan Y, Roehrborn CG, Liu J, Vessella R, Nelson PS, **Kapur P**, Guo X, Mirzaei H, Auchus RJ, Sharifi N. A gain-of-function mutation in DHT synthesis in castration-resistant prostate cancer. **Cell**. 2013 Aug 29;154(5):1074-84. PubMed PMID: 23993097; NIHMSID: NIHMS510042; PubMed Central PMCID: PMC3931012.
47.	Ghayee HK, Giubellino A, Click A, **Kapur P**, Christie A, et al. Phospho-mTOR is not upregulated in metastatic SDHB paragangliomas. **Eur J Clin Invest**. 2013 Sep;43(9):970-7. PubMed PMID: 23889685; NIHMSID: NIHMS750169; PubMed Central PMCID: PMC4716658.
48.	Lotan Y, Bagrodia A, Passoni N, Rachakonda V, **Kapur P**, et al. Prospective evaluation of a molecular marker panel for prediction of recurrence and cancer-specific survival after radical cystectomy. **Eur Urol**. 2013 Sep;64(3):465-71. PubMed PMID: 23571005.

49.	Ellis CL, Chang AG, Cimino-Mathews A, Argani P, Youssef RF, **Kapur P**, Montgomery EA, Epstein JI. GATA-3 immunohistochemistry in the differential diagnosis of adenocarcinoma of the urinary bladder. **Am J Surg Pathol**. 2013 Nov;37(11):1756-60. PubMed PMID: 24061521.
50.	Gayed BA, Youssef RF, Bagrodia A, **Kapur P**, Darwish OM, et al. Prognostic role of cell cycle and proliferative biomarkers in patients with clear cell renal cell carcinoma. **J Urol**. 2013 Nov;190(5):1662-7. PubMed PMID: 23792148.
51.	Shariat SF, Passoni N, Bagrodia A, Rachakonda V, Xylinas E, Robinson B, **Kapur P**, Sagalowsky AI, Lotan Y. Prospective evaluation of a preoperative biomarker panel for prediction of upstaging at radical cystectomy. **BJU Int**. 2014 Jan;113(1):70-6. PubMed PMID: 24053584.
52.	Krabbe LM, Bagrodia A, Lotan Y, Gayed BA, Darwish OM, Youssef RF, John G, Harrow B, Jacobs C, Gaitonde M, Sagalowsky AI, Shariat SF, **Kapur P**, Margulis V. Prospective analysis of Ki-67 as an independent predictor of oncologic outcomes in patients with high grade upper tract urothelial carcinoma. **J Urol**. 2014 Jan;191(1):28-34. PubMed PMID: 23871758.
53.	Belsante M, Darwish O, Youssef R, Bagrodia A, **Kapur P**, et al. Lymphovascular invasion in clear cell renal cell carcinoma--association with disease-free and cancer-specific survival. **Urol Oncol**. 2014 Jan;32(1):30.e23-8. PubMed PMID: 23428539.
54.	Krabbe LM, Lotan Y, Bagrodia A, Gayed BA, Darwish OM, Youssef RF, Bolenz C, Sagalowsky AI, Raj GV, Shariat SF, **Kapur P**, Margulis V. Surgical management of the distal ureter during radical nephroureterectomy is an independent predictor of oncological outcomes: results of a current series and a review of the literature. **Urol Oncol**. 2014 Jan;32(1):54.e19-26. PubMed PMID: 24360665.
55.	**Kapur P**, Christie A, Raman JD, Then MT, Nuhn P, et al. BAP1 immunohistochemistry predicts outcomes in a multi-institutional cohort with clear cell renal cell carcinoma. **J Urol**. 2014 Mar;191(3):603-10. PubMed PMID: 24076305.
56.	Wang S, Kollipara RK, Srivastava N, Li R, Ravindranathan P, Hernandez E, Freeman E, Humphries CG, **Kapur P**, Lotan Y, Fazli L, Gleave ME, Plymate SR, Raj GV, Hsieh JT, Kittler R. Ablation of the oncogenic transcription factor ERG by deubiquitinase inhibition in prostate cancer. **Proc Natl Acad Sci U S A**. 2014 Mar 18;111(11):4251-6. PubMed PMID: 24591637; PubMed Central PMCID: PMC3964108.
57.	Weinstein J.N., Akbani R., Broom B.M., Wang W., Verhaak R.G.W., McConkey D., Lerner S., Morgan M., Creighton C.J., Smith C., Cherniack A.D., Kim J., Pedamallu C.S., Noble M.S., Al-Ahmadie H.A., Reuter V.E., Rosenberg J.E., F.Bajorin D., Bochner B.H., Solit D.B., Koppie T., Robinson B., Gordenin D.A., Fargo D., Klimczak L.J., Roberts S.A., Au J., Laird P.W., Hinoue T., Schultz N., Ramirez R., Hansel D., Hoadley K.A., Kim W.Y., Damrauer J.S., Baylin S.B., Mungall A.J., Robertson A.G., Chu A., Kwiatkowski D.J., Sougnez C., Cibulskis K., Lichtenstein L., Sivachenko A., Stewart C., Lawrence M.S., Getz G., Lander E., Gabrie S.B., Donehower L., Carter S.L., Saksena G., Schumacher S.E., Freeman S.S., Jung J., Bhatt A.S., Pugh T., Beroukhim R., Meyerson M., Ally A., Balasundaram M., Butterfield Y.S.N., Dhalla N., Hirst C., Holt R.A., Jones S.J.M., Lee D., Li H.I., Marra M.A., Mayo M., Moore R.A., Schein J.E., Sipahimalani P., Tam A., Thiessen N., Wong T., Wye N., Bowlby R., Chuah E., Guin R., Shen H., Bootwalla M.S., Triche Jr. T., Lai P.H., Van Den Berg D.J., Weisenberger D.J., Balu S., Bodenheimer T., Hoyle A.P., Jefferys S.R., Meng S., Mose L.E., Simons J.V., Soloway M.G., Wu J., Parker J.S., Hayes D.N., Roach J., Buda E., Jones C.D., Mieczkowski P.A., Tan D., Veluvolu U., Waring S., Auman J.T., Perou C.M., Wilkerson M.D., Santoso N., Parfenov M., Ren X., Pantazi A., Hadjipanayis A., Seidman J., Kucherlapati R., Lee S., Yang L., Park P.J., Xu A.W., Protopopov A., Zhang J., Bristow C., Mahadeshwar H.S., Seth S., Song X., Tang J., Zeng D., Chin L., Guo C., Casasent T.D., Liu W., Ju Z., Motter T., Peng B., Ryan M., Su X., Yang J.-Y., Lorenzi P.L., Yao H., Zhang N., Zhang J., Mills G.B., Cho J., DiCara D., Frazer S., Gehlenborg N., Heiman D.I., Lin P., Liu Y., Stojanov P., Voet D., Zhang H., Zou L., Bernard B., Kreisberg D., Reynolds S., Rovira H., Shmulevich I., Gao J., Jacobsen A., Aksoy B.A., Antipin Y., Ciriello G., Dresdner G., Gross B., Lee W., Reva B., Shen R., Sinha R., Sumer S.O., Weinhold N., Ladanyi M., Sander C., Benz C., Carlin D., Haussler D., Ng S., Paull E., Stuart J., Zhu J., Liu Y., Zhang W., Taylor B.S., Lichtenberg T.M., Zmuda E., Barr T., Black A.D., George M., Hanf B., Helsel C., McAllister C., Ramirez N.C., Tabler T.R., Weaver S., Wise L., Bowen

	J., Gastier-Foster J.M., Jian W., Tello S., Ittman M., Castro P., McClenden W.D., Gibbs R., Saller C., Tarvin K., DiPiero J.M., Owens J., Bollag R., Li Q., Weinberger P., Czerwinski C., Huelsenbeck-Dill L., Iacocca M., Petrelli N., Rabeno B., Swanson P., Shelton T., Curley E., Gardner J., Mallery D., Penny R., Van Bang N., Hanh P.T., Kohl B., Van Le X., Phu B.D., Thorp R., Tien N.V., Vinh L.Q., Sandusky G., Burks E., Christ K., Gee J., Holway A., Moinzadeh A., Sorcini A., Sullivan T., Garcia-Grossman I.R., Regazzi A.M., Boice L., Rathmell W.K., Thorne L., Bastacky S., Davies B., Dhir R., Gingrich J., Hrebinko R., Maranchie J., Nelson J., Parwani A., Bshara W., Gaudioso C., Morrison C., Alexopoulou V., Bartlett J., Engel J., Kodeeswaran S., Antic T., O'Donnell P.H., Smith N.D., Steinberg G.D., Egea S., Gomez-Fernandez C., Herbert L., Jorda M., Soloway M., Beaver A., Carter S., **Kapur P**., Lewis C., Lotan Y., Bondaruk J., Czerniak B., Skinner E., Aldape K., Jensen M.A., Kahn A.B., Pihl T.D., Pot D.A., Srinivasan D., Wan Y., Ferguson M.L., Zenklusen J.C., Davidsen T., Demchok J.A., Shaw K.R.M., Sheth M., Tarnuzzer R., Wang Z., Yang L., Hutter C., Ozenberger B.A., Sofia H.J., Eley G. Comprehensive molecular characterization of urothelial bladder carcinoma. **Nature**. 2014 Mar 20;507(7492):315-22. PubMed PMID: 24476821; NIHMSID: NIHMS551110; PubMed Central PMCID: PMC3962515.
58.	Joseph RW, **Kapur P**, Serie DJ, Eckel-Passow JE, Parasramka M, et al. Loss of BAP1 protein expression is an independent marker of poor prognosis in patients with low-risk clear cell renal cell carcinoma. **Cancer**. 2014 Apr 1;120(7):1059-67. PubMed PMID: 24382589; NIHMSID: NIHMS546948; PubMed Central PMCID: PMC4075029.
59.	Krabbe LM, Lotan Y, Bagrodia A, Gayed BA, Darwish OM, Youssef RF, Bolenz C, Sagalowsky AI, Raj GV, Shariat SF, **Kapur P**, Margulis V. Prospective comparison of molecular signatures in urothelial cancer of the bladder and the upper urinary tract--is there evidence for discordant biology? **J Urol**. 2014 Apr;191(4):926-31. PubMed PMID: 24060642.
60.	Gayed BA, Youssef RF, Bagrodia A, Darwish OM, **Kapur P,** Sagalowsky A, Lotan Y, Margulis V. Ki67 is an independent predictor of oncological outcomes in patients with localized clear-cell renal cell carcinoma. **BJU Int**. 2014 Apr;113(4):668-73. PubMed PMID: 23937277.
61.	Wu K, Liu J, Tseng SF, Gore C, Ning Z, Sharifi N, Fazli L, Gleave M, **Kapur P**, Xiao G, Sun X, Oz OK, Min W, Alexandrakis G, Yang CR, Hsieh CL, Wu HC, He D, Xie D, Hsieh JT. The role of DAB2IP in androgen receptor activation during prostate cancer progression. **Oncogene**. 2014 Apr 10;33(15):1954-63. PubMed PMID: 23604126.
62.	Sharma V, Olweny EO, **Kapur P**, Cadeddu JA, Roehrborn CG, et al. Prostate cancer detection using combined auto-fluorescence and light reflectance spectroscopy: ex vivo study of human prostates. **Biomed Opt Express.** 2014 May 1;5(5):1512-29. PubMed PMID: 24877012; PubMed Central PMCID: PMC4026896.
63.	Krabbe LM, Westerman ME, Bagrodia A, Gayed BA, Darwish OM, Haddad AQ, Khalil D, **Kapur P**, Sagalowsky AI, Lotan Y, Margulis V. Dysregulation of β-catenin is an independent predictor of oncologic outcomes in patients with clear cell renal cell carcinoma. **J Urol**. 2014 Jun;191(6):1671-7. PubMed PMID: 24291548.
64.	Jacobs C, Tumati V, **Kapur P**, Yan J, Hong D, et al. DOC-2/DAB2 interacting protein status in high-risk prostate cancer correlates with outcome for patients treated with radiation therapy. **Int J Radiat Oncol Biol Phys**. 2014 Jul 15;89(4):729-35. PubMed PMID: 24867541; NIHMSID: NIHMS664275; PubMed Central PMCID: PMC4464555.
65.	Chung PH, Krabbe LM, Darwish OM, Westerman ME, Bagrodia A, Gayed BA, Haddad AQ, **Kapur P**, Sagalowsky AI, Lotan Y, Margulis V. Degree of hydronephrosis predicts adverse pathological features and worse oncologic outcomes in patients with high-grade urothelial carcinoma of the upper urinary tract. **Urol Oncol**. 2014 Oct;32(7):981-8. PubMed PMID: 25022858.
66.	Bagrodia A, Krabbe LM, Gayed BA, **Kapur P**, Bernstein I, et al. Evaluation of the prognostic significance of altered mammalian target of rapamycin pathway biomarkers in upper tract urothelial carcinoma. **Urology**. 2014 Nov;84(5):1134-40. PubMed PMID: 25443916.
67.	Wang SS, Gu YF, Wolff N, Stefanius K, Christie A, Dey A, Hammer RE, Xie XJ, Rakheja D, Pedrosa I, Carroll T, McKay RM, **Kapur P***, Brugarolas J. Bap1 is essential for kidney function and

	cooperates with Vhl in renal tumorigenesis. **Proc Natl Acad Sci U S A**. 2014 Nov 18;111(46):16538-43. PubMed PMID: 25359211; PubMed Central PMCID: PMC4246264.
68.	Ho TH, **Kapur P***, Joseph RW, Serie DJ, Eckel-Passow JE, et al. Loss of PBRM1 and BAP1 expression is less common in non-clear cell renal cell carcinoma than in clear cell renal cell carcinoma. **Urol Oncol**. 2015 Jan;33(1):23.e9-14. PubMed PMID: 25465300; NIHMSID: NIHMS638543; PubMed Central PMCID: PMC4274200.
69.	Gayed BA, Bagrodia A, Gaitonde M, Krabbe LM, Meissner M, **Kapur P**, Youssef RF, Sagalowsky A, Lotan Y, Margulis V. Feasibility of obtaining biomarker profiles from endoscopic biopsy specimens in upper tract urothelial carcinoma: preliminary results. **Urol Oncol**. 2015 Jan;33(1):18.e21-6. PubMed PMID: 25454486.
70.	Durinck S*, Stawiski EW*, Pavía-Jiménez A*, Modrusan Z*, **Kapur P***, Jaiswal BS, Zhang N, Toffessi-Tcheuyap V, Nguyen TT, Pahuja KB, Chen YJ, Saleem S, Chaudhuri S, Heldens S, Jackson M, Peña-Llopis S, Guillory J, Toy K, Ha C, Harris CJ, Holloman E, Hill HM, Stinson J, Rivers CS, Janakiraman V, Wang W, Kinch LN, Grishin NV, Haverty PM, Chow B, Gehring JS, Reeder J, Pau G, Wu TD, Margulis V, Lotan Y, Sagalowsky A, Pedrosa I, de Sauvage FJ, Brugarolas J, Seshagiri S. Spectrum of diverse genomic alterations define non-clear cell renal carcinoma subtypes. **Nat Genet.** 2015 Jan;47(1):13-21. PubMed PMID: 25401301; NIHMSID: NIHMS701151; PubMed Central PMCID: PMC4489427.
71.	Haddad AQ, **Kapur P**, Singla N, Raman JD, Then MT, Nuhn P, Buchner A, Bastian P, Seitz C, Shariat SF, Bensalah K, Rioux-Leclercq N, Sagalowsky A, Lotan Y, Margulis V. Validation of mammalian target of rapamycin biomarker panel in patients with clear cell renal cell carcinoma. **Cancer**. 2015 Jan 1;121(1):43-50. PubMed PMID: 25186283.
72.	Chung PH, Darwish OM, Roehrborn CG, **Kapur P**, Lotan Y. Histologic upgrading in patients eligible for active surveillance on saturation biopsy. **Can J Urol**. 2015 Feb;22(1):7656-60. PubMed PMID: 25694015.
73.	Youssef RF, von Rundstedt FC, **Kapur P**, Mosbah A, Abol-Enein H, et al. Utility of biomarkers in the prediction of oncologic outcome after radical cystectomy for squamous cell carcinoma. **J Urol**. 2015 Feb;193(2):451-6. PubMed PMID: 25200806.
74.	Hosler GA, Davoli T, Mender I, Litzner B, Choi J, **Kapur P**, Shay JW, Wang RC. A primary melanoma and its asynchronous metastasis highlight the role of BRAF, CDKN2A, and TERT. **J Cutan Pathol**. 2015 Feb;42(2):108-17. PubMed PMID: 25407517; NIHMSID: NIHMS699917; PubMed Central PMCID: PMC4470704.
75.	Youssef RF, **Kapur P**, Mosbah A, Abol-Enein H, Ghoneim M, et al. Role of fibroblast growth factor in squamous cell carcinoma of the bladder: prognostic biomarker and potential therapeutic target. **Urol Oncol**. 2015 Mar;33(3):111.e1-7. PubMed PMID: 25477183.
76.	Krabbe LM, Bagrodia A, Haddad AQ, **Kapur P**, Khalil D, et al. Multi-institutional validation of the predictive value of Ki-67 in patients with high grade urothelial carcinoma of the upper urinary tract. **J Urol**. 2015 May;193(5):1486-93. PubMed PMID: 25451830.
77.	Wolff NC, Pavía-Jiménez A, Tcheuyap VT, Alexander S, Vishwanath M, Christie A, Xie XJ, Williams NS, **Kapur P**, Posner B, McKay RM, Brugarolas J. High-throughput simultaneous screen and counterscreen identifies homoharringtonine as synthetic lethal with von Hippel-Lindau loss in renal cell carcinoma. **Oncotarget**. 2015 Jul 10;6(19):16951-62. PubMed PMID: 26219258; PubMed Central PMCID: PMC4627284.
78.	Sadowski SM, Boufraqech M, Zhang L, Mehta A, **Kapur P**, et al. Torin2 targets dysregulated pathways in anaplastic thyroid cancer and inhibits tumor growth and metastasis. **Oncotarget.** 2015 Jul 20;6(20):18038-49. PubMed PMID: 25945839; PubMed Central PMCID: PMC4627234.
79.	Kim H, Rodriguez-Navas C, Kollipara RK, **Kapur P**, Pedrosa I, et al. Unsaturated Fatty Acids Stimulate Tumor Growth through Stabilization of β-Catenin. **Cell Rep.** 2015 Oct 20;13(3):496-503. PubMed PMID: 26456834; NIHMSID: NIHMS721593; PubMed Central PMCID: PMC4618234.
80.	Wei JH, Haddad A, Wu KJ, Zhao HW, **Kapur P**, et al. A CpG-methylation-based assay to predict survival in clear cell renal cell carcinoma. **Nat Commun**. 2015 Oct 30;6:8699. PubMed PMID: 26515236; PubMed Central PMCID: PMC4846314.

81.	Jacobs C, Tumati V, **Kapur P**, Yan J, Xie XJ, et al. Pretreatment biopsy analysis of DAB2IP identifies subpopulation of high-risk prostate cancer patients with worse survival following radiation therapy. **Cancer Med**. 2015 Dec;4(12):1844-52. PubMed PMID: 26471467; PubMed Central PMCID: PMC4940806.
82.	Krabbe LM, Bagrodia A, Westerman ME, Gayed BA, Haddad AQ, Sagalowsky AI, Shariat SF, **Kapur P**, Lotan Y, Margulis V. Molecular profile of urothelial carcinoma of the upper urinary tract: are pelvicalyceal and ureteral tumors different? **World J Urol**. 2016 Jan;34(1):105-12. PubMed PMID: 25991599.
83.	Ho TH, **Kapur P**, Joseph RW, Serie DJ, Eckel-Passow JE, et al. Loss of histone H3 lysine 36 trimethylation is associated with an increased risk of renal cell carcinoma-specific death. **Mod Pathol**. 2016 Jan;29(1):34-42. PubMed PMID: 26516698; NIHMSID: NIHMS724311; PubMed Central PMCID: PMC4697879.
84.	Joseph RW, **Kapur P**, Serie DJ, Parasramka M, Ho TH, et al. Clear Cell Renal Cell Carcinoma Subtypes Identified by BAP1 and PBRM1 Expression. **J Urol**. 2016 Jan;195(1):180-7. PubMed PMID: 26300218; NIHMSID: NIHMS820978; PubMed Central PMCID: PMC5221690.
85.	Wang CJ, Ying J, **Kapur P**, Wohlfeld B, Roehrborn C, et al. Solitary recurrence of castration-resistant prostate cancer with low or undetectable levels of prostate specific antigen salvaged with local ablative radiation therapy: A case report. **Oncol Lett.** 2016 Jan;11(1):713-716. PubMed PMID: 26870272; PubMed Central PMCID: PMC4727102.
86.	Passoni NM, Shariat SF, Bagrodia A, Francis F, Rachakonda V, Xylinas E, **Kapur P**, Sagalowsky AI, Lotan Y. Concordance in Biomarker Status Between Bladder Tumors at Time of Transurethral Resection and Subsequent Radical Cystectomy: Results of a 5-year Prospective Study. **Bladder Cancer**. 2016 Jan 7;2(1):91-99. PubMed PMID: 27376130; PubMed Central PMCID: PMC4927883.
87.	Zhang Y, K**apur P**, Yuan Q, Xi Y, Carvo I, et al. Tumor Vascularity in Renal Masses: Correlation of Arterial Spin-Labeled and Dynamic Contrast-Enhanced Magnetic Resonance Imaging Assessments. **Clin Genitourin Cancer**. 2016 Feb;14(1):e25-36. PubMed PMID: 26422014; NIHMSID: NIHMS719592; PubMed Central PMCID: PMC4698181.
88.	Morgan MS, Lay AH, Wang X, **Kapur P**, Ozayar A, et al. Light Reflectance Spectroscopy to Detect Positive Surgical Margins on Prostate Cancer Specimens**. J Urol**. 2016 Feb;195(2):479-83. PubMed PMID: 26410735.
89.	Yu M, Zhou J, Du B, Ning X, Authement C, Gandee L, **Kapur P**, Hsieh JT, Zheng J. Noninvasive Staging of Kidney Dysfunction Enabled by Renal-Clearable Luminescent Gold Nanoparticles. **Angew Chem Int Ed Engl**. 2016 Feb 18;55(8):2787-91. PubMed PMID: 26800513; NIHMSID: NIHMS768908; PubMed Central PMCID: PMC4834218.
90.	Wang Z.-R., Wei J.-H., Zhou J.-C., Haddad A., Zhao L.-Y., **Kapur P**., Wu K.-J., Wang B., Yu Y.-H., Liao B., He D.-L., Chen W., Margulis V., Hsieh J.-T., Luo J.-H. Validation of DAB2IP methylation and its relative significance in predicting outcome in renal cell carcinoma. **Oncotarget.** 2016 May 24;7(21):31508-19. PubMed PMID: 27129174; PubMed Central PMCID: PMC5058774.
91.	Gayed BA, Youssef R, Darwish O, **Kapur P**, Bagrodia A, et al. Multi-disciplinary surgical approach to the management of patients with renal cell carcinoma with venous tumor thrombus: 15 year experience and lessons learned. **BMC Urol.** 2016 Jul 19;16(1):43. PubMed PMID: 27435269; PubMed Central PMCID: PMC4952069.
92.	Raman JD, Warrick JI, Caruso C, Yang Z, Shuman L, Bruggeman RD, Shariat S, Karam JA, Wood C, Weizer AZ, Remzi M, Haitel A, Bensalah K, Rioux-Leclerq N, Bolenz C, Roscigno M, Krabbe LM, **Kapur P**, Lotan Y, Margulis V, Altered Expression of the Transcription Factor Forkhead Box A1 (FOXA1) Is Associated with Poor Prognosis in Urothelial Carcinoma of the Upper Urinary Tract. **Urology**. 2016 Aug;94:314.e1-7. PubMed PMID: 27215483.
93.	Zhou J, Luo J, Wu K, Yun EJ, **Kapur P**, et al. Loss of DAB2IP in RCC cells enhances their growth and resistance to mTOR-targeted therapies. **Oncogene**. 2016 Sep 1;35(35):4663-74. PubMed PMID: 26876207.
94.	Clavijo Jordan MV, Lo ST, Chen S, Preihs C, Chirayil S, Zhang S, **Kapur P**, Li WH, De Leon-Rodriguez LM, Lubag AJ, Rofsky NM, Sherry AD. Zinc-sensitive MRI contrast agent detects

	differential release of Zn(II) ions from the healthy vs malignant mouse prostate. **Proc Natl Acad Sci U S A.** 2016 Sep 13;113(37):E5464-71. PubMed PMID: 27562169; PubMed Central PMCID: PMC5027418.
95.	Passoni N, Gayed B, **Kapur P**, Sagalowsky AI, Shariat SF, et al. Cell-cycle markers do not improve discrimination of EORTC and CUETO risk models in predicting recurrence and progression of non-muscle-invasive high-grade bladder cancer. **Urol Oncol**. 2016 Nov;34(11):485.e7-485.e14. PubMed PMID: 27637323.
96.	Chen W, Hill H, Christie A, Kim MS, Holloman E, Pavia-Jimenez A, Homayoun F, Ma Y, Patel N, Yell P, Hao G, Yousuf Q, Joyce A, Pedrosa I, Geiger H, Zhang H, Chang J, Gardner KH, Bruick RK, Reeves C, Hwang TH, Courtney K, Frenkel E, Sun X, Zojwalla N, Wong T, Rizzi JP, Wallace EM, Josey JA, Xie Y, Xie XJ, **Kapur P**, McKay RM, Brugarolas J. Targeting renal cell carcinoma with a HIF-2 antagonist. **Nature**. 2016 Nov 3;539(7627):112-117. PubMed PMID: 27595394; NIHMSID: NIHMS836022; PubMed Central PMCID: PMC5340502.
97.	Yuan Q, **Kapur P**, Zhang Y, Xi Y, Carvo I, et al. Intratumor Heterogeneity of Perfusion and Diffusion in Clear-Cell Renal Cell Carcinoma: Correlation with Tumor Cellularity. **Clin Genitourin Cancer**. 2016 Dec;14(6):e585-e594. PubMed PMID: 27209349; NIHMSID: NIHMS780874; PubMed Central PMCID: PMC5075271.
98.	Lay AH, Wang X, Morgan MS, **Kapur P**, Liu H, et al. Detecting positive surgical margins: utilisation of light-reflectance spectroscopy on ex vivo prostate specimens. **BJU Int**. 2016 Dec;118(6):885-889. PubMed PMID: 27105389.
99.	Mani RS, Amin MA, Li X, Kalyana-Sundaram S, Veeneman BA, Wang L, Ghosh A, Aslam A, Ramanand SG, Rabquer BJ, Kimura W, Tran M, Cao X, Roychowdhury S, Dhanasekaran SM, Palanisamy N, Sadek HA, **Kapur P**, Koch AE, Chinnaiyan AM. Inflammation-Induced Oxidative Stress Mediates Gene Fusion Formation in Prostate **Cancer. Cell Rep.** 2016 Dec 6;17(10):2620-2631. PubMed PMID: 27926866; NIHMSID: NIHMS829666; PubMed Central PMCID: PMC5147555.
100.	Bowman IA, Pedrosa I, **Kapur P**, Brugarolas J. Renal Cell Carcinoma with Pulmonary Metastasis and Metachronous Non-Small Cell Lung Cancer. Clin Genitourin Cancer. 2017 Feb 6;PubMed PMID: 28258962.
101.	Eckel-Passow JE, Serie DJ, Cheville JC, Ho TH, **Kapur P**, et al. BAP1 and PBRM1 in metastatic clear cell renal cell carcinoma: tumor heterogeneity and concordance with paired primary tumor. **BMC Urol**. 2017 Mar 21;17(1):19. PubMed PMID: 28327121; PubMed Central PMCID: PMC5361787.
102.	Costa DN, Chatzinoff Y, Passoni NM, **Kapur P**, Roehrborn CG, et al. Improved Magnetic Resonance Imaging-Pathology Correlation with Imaging-Derived, 3D-Printed, Patient-Specific Whole-Mount Molds of the Prostate. **Invest Radiol**. 2017 Apr 4;PubMed PMID: 28379863.
103.	Luchini C., Robertson S.A., Hong S.-M., Felsenstein M., Anders R.A., Pea A., Nottegar A., Veronese N., He J., Weiss M.J., Capelli P., Scarpa A., Argani P., **Kapur P**., Wood L.D. PBRM1 loss is a late event during the development of cholangiocarcinoma. **Histopathology.** 2017 Apr 10;PubMed PMID: 28394406.
104.	Richardson TE, Georgescu MM, **Kapur P**, Hwang H, Barnett SL, et al. Unusual skull tumors with psammomatoid bodies: a diagnostic challenge. **Clin Neuropathol**. 2017 May/Jun;36 (2017)(3):114-120. PubMed PMID: 28128725.
105.	Haddad A.Q., Luo J.-H., Krabbe L.-M., Darwish O., Gayed B., Youssef R., **Kapur P**., Rakheja D., Lotan Y., Sagalowsky A., Margulis V. Prognostic value of tissue-based biomarker signature in clear cell renal cell carcinoma. **BJU Int**. 2017 May;119(5):741-747. PubMed PMID: 28075543.
106.	Gu Y.-F., Cohn S., Christie A., McKenzie T., Wolff N., Do Q.N., Madhuranthakam A.J., Pedrosa I., Wang T., Dey A., Busslinger M., Xie X.-J., Hammer R.E., McKay R.M., **Kapur P**., Brugarolas J. Modeling Renal Cell Carcinoma in Mice: Bap1 and Pbrm1 Inactivation Drive Tumor Grade. **Cancer Discov**. 2017 May 4;PubMed PMID: 28473526.
107.	Hofer MD, **Kapur P**, Cordon BH, Hamoun F, Russell D, et al. Low Testosterone Levels Result in Decreased Periurethral Vascularity via an Androgen Receptor-mediated Process: Pilot Study in Urethral Stricture Tissue. **Urology**. 2017 Jul;105:175-180. PubMed PMID: 28263822.

108.	Xi Y, Yuan Q, Zhang Y, Madhuranthakam AJ, Fulkerson M, Margulis V, Brugarolas J, **Kapur P**, Cadeddu JA, Pedrosa I. Statistical clustering of parametric maps from dynamic contrast enhanced MRI and an associated decision tree model for non-invasive tumour grading of T1b solid clear cell renal cell carcinoma. **Eur Radiol.** 2017 Jul 5. doi: 10.1007/s00330-017-4925-6. [Epub ahead of print] PubMed PMID: 28681074.
109.	Clark H, Khatri G, **Kapur P**, Pedrosa I. Splenic Involvement in Disseminated Mycobacterium avium-intracellulare Infection: Magnetic Resonance Imaging Findings. **J Comput Assist Tomogr**. 2017 Jul 13. doi: 10.1097/RCT.0000000000000639.[Epub ahead of print] PubMed PMID: 28708727.
110.	Wang B, Lo UG, Wu K, **Kapur P**, Liu X, Huang J, Chen W, Hernandez E, Santoyo J, Ma SH, Pong RC, He D, Cheng YQ, Hsieh JT. Developing new targeting strategy for androgen receptor variants in castration resistant prostate cancer. **Int J Cancer**. 2017 Nov 15;141(10):2121-2130. doi: 10.1002/ijc.30893. Epub 2017 Jul 31. PubMed PMID: 28722220.
111.	Zhang Y, Udayakumar D, Cai L, Hu Z, **Kapur P**, Kho EY, Pavía-Jiménez A, Fulkerson M, de Leon AD, Yuan Q, Dimitrov IE, Yokoo T, Ye J, Mitsche MA, Kim H, McDonald JG, Xi Y, Madhuranthakam AJ, Dwivedi DK, Lenkinski RE, Cadeddu JA, Margulis V, Brugarolas J, DeBerardinis RJ, Pedrosa I. Addressing metabolic heterogeneity in clear cell renal cell carcinoma with quantitative Dixon MRI. **JCI Insight**. 2017 Aug 3;2(15). pii: 94278. doi: 10.1172/jci.insight.94278. [Epub ahead of print] PubMed PMID: 28768909; PubMed Central PMCID: PMC5543910.
112.	Xu J, Yu M, Carter P, Hernandez E, Dang A, **Kapur P**, Hsieh JT, Zheng J. In Vivo X-ray Imaging of Transport of Renal Clearable Gold Nanoparticles in the Kidneys. **Angew Chem Int Ed Engl.** 2017 Oct 16;56(43):13356-13360. doi:10.1002/anie.201707819. Epub 2017 Sep 25. PubMed PMID: 28881491.
113.	Ho TH, **Kapur P***, Eckel-Passow JE, Christie A, Joseph RW, Serie DJ, Cheville JC, Thompson RH, Homayoun F, Panwar V, Brugarolas J, Parker AS. Multicenter Validation of Enhancer of Zeste Homolog 2 Expression as an Independent Prognostic Marker in Localized Clear Cell Renal Cell Carcinoma. **J Clin Oncol.** 2017 Oct 4:JCO2017733238. doi: 10.1200/JCO.2017.73.3238. [Epub ahead of print] PubMed PMID: 28976794.
114.	Collins RRJ, Patel K, Putnam WC, **Kapur P**, Rakheja D. Oncometabolites: A New Paradigm for Oncology, Metabolism, and the Clinical Laboratory. **Clin Chem.** 2017 Dec;63(12):1812-1820. doi: 10.1373/clinchem.2016.267666. Epub 2017 Oct 16. Review. PubMed PMID: 29038145.
115.	Kittler R, Shiang C, Hutchinson R, Kollipara RK, **Kapur P**, Franto F, Lotan Y. Grade progression in urothelial carcinoma can occur with high or low mutational homology: a first-step toward tumor-specific care in initial low-grade bladder cancer. **Oncotarget.** 2018 Jan 6;9(10):9415-9424. doi: 10.18632/oncotarget.24072.eCollection 2018 Feb 6. PubMed PMID: 29507699; PubMed Central PMCID: PMC5823658.
116.	Freifeld Y, **Kapur P**, Chitkara R, Lee F, Khemani P, Bagrodia A. Metastatic "Burned Out" Seminoma Causing Neurological Paraneoplastic Syndrome-Not Quite "Burned Out". **Front Neurol.** 2018 Jan 30;9:20. doi: 10.3389/fneur.2018.00020. eCollection 2018. PubMed PMID: 29441039; PubMed Central PMCID: PMC5797537.
117.	Dwivedi DK, Chatzinoff Y, Zhang Y, Yuan Q, Fulkerson M, Chopra R, Brugarolas J, Cadeddu JA, **Kapur P**, Pedrosa I. Development of a Patient-specific Tumor Mold Using Magnetic Resonance Imaging and 3-Dimensional Printing Technology for Targeted Tissue Procurement and Radiomics Analysis of Renal Masses. **Urology.** 2018 Feb;112:209-214. doi: 10.1016/j.urology.2017.08.056. Epub 2017 Oct 19. PubMed PMID: 29056576; PubMed Central PMCID: PMC5885749.

118.	Chen KS, Fustino NJ, Shukla AA, Stroup EK, Budhipramono A, Ateek C, Stuart SH, Yamaguchi K, **Kapur P**, Frazier AL, Lum L, Looijenga LHJ, Laetsch TW, Rakheja D, Amatruda JF. EGF Receptor and mTORC1 Are Novel Therapeutic Targets in Nonseminomatous Germ Cell Tumors. **Mol Cancer Ther.** 2018 May;17(5):1079-1089. doi: 10.1158/1535-7163.MCT-17-0137. Epub 2018 Feb 26. PubMed PMID: 29483210; PubMed Central PMCID: PMC5932259.
119.	Singla N, Krabbe LM, Aydin AM, Panwar V, Woldu SL, Freifeld Y, Wood CG, Karam JA, Weizer AZ, Raman JD, Remzi M, Rioux-Leclercq N, Haitel A, Roscigno M, Bolenz C, Bensalah K, Sagalowsky AI, Shariat SF, Lotan Y, Bagrodia A, **Kapur P**, Margulis V. Multi-institutional evaluation of the prognostic significance of EZH2 expression in high-grade upper tract urothelial carcinoma. **Urol Oncol.** 2018 Jul;36(7):343.e1-343.e8. doi: 10.1016/j.urolonc.2018.04.004. Epub 2018 May 7. PubMed PMID: 29748098.
120.	Centenera MM, Hickey TE, Jindal S, Ryan NK, Ravindranathan P, Mohammed H, Robinson JL, Schiewer MJ, Ma S, **Kapur P**, Sutherland PD, Hoffmann CE, Roehrborn CG, Gomella LG, Carroll JS, Birrell SN, Knudsen KE, Raj GV, Butler LM, Tilley WD. A patient-derived explant (PDE) model of hormone-dependent cancer. **Mol Oncol.** 2018 Sep;12(9):1608-1622. doi: 10.1002/1878-0261.12354. Epub 2018 Aug 16. PubMed PMID: 30117261; PubMed Central PMCID: PMC6120230.
121.	Wang T, Lu R, **Kapur P**, Jaiswal BS, Hannan R, Zhang Z, Pedrosa I, Luke JJ, Zhang H, Goldstein LD, Yousuf Q, Gu YF, McKenzie T, Joyce A, Kim MS, Wang X, Luo D, Onabolu O, Stevens C, Xie Z, Chen M, Filatenkov A, Torrealba J, Luo X, Guo W, He J, Stawiski E, Modrusan Z, Durinck S, Seshagiri S, Brugarolas J. An Empirical Approach Leveraging Tumorgrafts to Dissect the Tumor Microenvironment in Renal Cell Carcinoma Identifies Missing Link to Prognostic Inflammatory Factors. **Cancer Discov.** 2018 Sep;8(9):1142-1155. doi: 10.1158/2159-8290.CD-17-1246. Epub 2018 Jun 8. PubMed PMID: 29884728; PubMed Central PMCID: PMC6125163.
122.	Chen X, Zhou Z, Hannan R, Thomas K, Pedrosa I, **Kapur P**, Brugarolas J, Mou X, Wang J. Reliable gene mutation prediction in clear cell renal cell carcinoma through multi-classifier multi-objective radiogenomics model. **Phys Med Biol.** 2018 Oct 24;63(21):215008. doi: 10.1088/1361-6560/aae5cd. PubMed PMID: 30277889; PubMed Central PMCID: PMC6240911.
123.	Argani P, Reuter VE, **Kapur P**, Brown JE, Sung YS, Zhang L, Williamson R, Francis G, Sommerville S, Swanson D, Dickson BC, Antonescu CR. Novel MEIS1-NCOA2 Gene Fusions Define a Distinct Primitive Spindle Cell Sarcoma of the Kidney. **Am J Surg Pathol.** 2018 Nov;42(11):1562-1570. doi: 10.1097/PAS.0000000000001140. PubMed PMID: 30179902.
124.	Courtney KD, Bezwada D, Mashimo T, Pichumani K, Vemireddy V, Funk AM, Wimberly J, McNeil SS, **Kapur P**, Lotan Y, Margulis V, Cadeddu JA, Pedrosa I, DeBerardinis RJ, Malloy CR, Bachoo RM, Maher EA. Isotope Tracing of Human Clear Cell Renal Cell Carcinomas Demonstrates Suppressed Glucose Oxidation In Vivo. **Cell Metab.** 2018 Nov 6;28(5):793-800.e2. doi: 10.1016/j.cmet.2018.07.020. Epub 2018 Aug 23. PubMed PMID: 30146487; PubMed Central PMCID: PMC6221993.
125.	Lo UG, Pong RC, Yang D, Gandee L, Hernandez E, Dang A, Lin CJ, Santoyo J, MaS, Sonavane R, Huang J, Tseng SF, Moro L, Arbini AA, **Kapur P**, Raj GV, He D, Lai CH, Lin H, Hsieh JT. IFN-r-induced IFIT5 promotes epithelial-to mesenchymal transition in prostate cancer via microRNA processing. **Cancer Res.** 2018 Nov 30.pii: canres.2207.2018. doi: 10.1158/0008-5472.CAN-18-2207. [Epub ahead of print] PubMed PMID: 30504123.
126.	Elias R, **Kapur P**, Pedrosa I, Brugarolas J. Renal Cell Carcinoma Pseudoprogression with Clinical Deterioration: To Hospice and Back. **Clin Genitourin Cancer.** 2018 Dec;16(6):485-488. doi: 10.1016/j.clgc.2018.07.015. Epub 2018 Jul 20. PubMed PMID: 30100272.
127.	Lo UG, Pong RC, Yang D, Gandee L, Hernandez E, Dang A, Lin CJ, Santoyo J, Ma S, Sonavane R, Huang J, Tseng SF, Moro L, Arbini AA, **Kapur P**, Raj GV, He D, Lai CH, Lin H, Hsieh JT. IFNγ-Induced IFIT5 Promotes Epithelial-to-Mesenchymal Transition in Prostate Cancer via miRNA Processing. **Cancer Res. 2019** Mar 15;79(6):1098-1112. doi: 10.1158/0008-5472.CAN-18-2207. Epub 2018 Nov 30. PubMed PMID: 30504123.

128.	Singla N, Walker JT, Woldu SL, De La Fuente K, Araj E, Swartz B, **Kapur P**, Roehrborn CG. Does proximity of positive prostate biopsy core to capsular margin help predict side-specific extracapsular extension at prostatectomy? **Can J Urol.** 2019 Feb;26(1):9634-9643. PubMed PMID: 30797246.
129.	Aydin AM, Singla N, Panwar V, Woldu SL, Freifeld Y, Wood CG, Karam JA, Weizer AZ, Raman JD, Remzi M, Rioux-Leclercq N, Haitel A, Roscigno M, Bolenz C, Bensalah K, Westerman ME, Sagalowsky AI, Shariat SF, Lotan Y, Bagrodia A, **Kapur P**, Margulis V, Krabbe LM. Prognostic significance of BAP1 expression in high-grade upper tract urothelial carcinoma: a multi-institutional study. **World J Urol.** 2019 Nov;37(11):2419-2427. doi: 10.1007/s00345-019-02678-x. Epub 2019 Feb 13. PubMed PMID: 30759271.
130.	Owyong M, Lotan Y, **Kapur P**, Panwar V, McKenzie T, Lee TK, Zi X, Martin JW, Mosbah A, Abol-Enein H, Ghoneim M, Youssef RF. Expression and prognostic utility of PD-L1 in patients with squamous cell carcinoma of the bladder. **Urol Oncol.** 2019 Jul;37(7):478-484. doi: 10.1016/j.urolonc.2019.02.017. Epub 2019 Mar 23. PubMed PMID: 30910351.
131.	Yun EJ, Lin CJ, Dang A, Hernandez E, Guo J, Chen WM, Allison J, Kim N, **Kapur P**, Brugarolas J, Wu K, He D, Lai CH, Lin H, Saha D, Baek ST, Chen BPC, Hsieh JT. Downregulation of Human DAB2IP Gene Expression in Renal Cell Carcinoma Results in Resistance to Ionizing Radiation. **Clin Cancer Res.** 2019 Jul 15;25(14):4542-4551. doi: 10.1158/1078-0432.CCR-18-3004. Epub 2019 Apr 18. PubMed PMID: 31000589;PubMed Central PMCID: PMC6635020.
132.	Peng C, Xu J, Yu M, Ning X, Huang Y, Du B, Hernandez E, **Kapur P**, Hsieh JT, Zheng J. Tuning the In Vivo Transport of Anticancer Drugs Using Renal-Clearable Gold Nanoparticles. **Angew Chem Int Ed Engl.** 2019 Jun 17;58(25):8479-8483. doi:10.1002/anie.201903256. Epub 2019 May 14. PubMed PMID: 31006932; PubMed Central PMCID: PMC6555664.
133.	Lee CF, Dang A, Hernandez E, Pong RC, Chen B, Sonavane R, Raj G, **Kapur P**, Lin HY, Wu SR, Ko CJ, Lo UG, Lee HY, Hsieh JT, Lee MS. Activation of sphingosine kinase by lipopolysaccharide promotes prostate cancer cell invasion and metastasis via SphK1/S1PR4/matriptase. **Oncogene.** 2019 Jul;38(28):5580-5598. doi: 10.1038/s41388-019-0833-3. Epub 2019 May 31. PubMed PMID: 31152147.
134.	Vento J, Mulgaonkar A, Woolford L, Nham K, Christie A, Bagrodia A, de Leon AD,Hannan R, Bowman I, McKay RM, **Kapur P**, Hao G, Sun X, Brugarolas J. PD-L1 detection using (89)Zr-atezolizumab immuno-PET in renal cell carcinoma tumorgrafts from a patient with favorable nivolumab response. **J Immunother Cancer.** 2019 Jun 3;7(1):144. doi: 10.1186/s40425-019-0607-z. PubMed PMID: 31155004; PubMed Central PMCID: PMC6545669.
135.	Diaz de Leon A, Pirasteh A, Costa DN, **Kapur P**, Hammers H, Brugarolas J, Pedrosa I. Current Challenges in Diagnosis and Assessment of the Response of Locally Advanced and Metastatic Renal Cell Carcinoma. **Radiographics.** 2019 Jul-Aug;39(4):998-1016. doi: 10.1148/rg.2019180178. Epub 2019 Jun 14. PubMed PMID: 31199711; PubMed Central PMCID: PMC6677287.
136.	Zhang Z, Luo D, Zhong X, Choi JH, Ma Y, Wang S, Mahrt E, Guo W, Stawiski EW,Modrusan Z, Seshagiri S, **Kapur P**, Hon GC, Brugarolas J, Wang T. SCINA: A Semi-Supervised Subtyping Algorithm of Single Cells and Bulk Samples. **Genes (Basel).** 2019 Jul 12;10(7). pii: E531. doi: 10.3390/genes10070531. PubMed PMID:31336988; PubMed Central PMCID: PMC6678337.
137.	Peng C, Yu M, Hsieh JT, **Kapur P**, Zheng J. Correlating Anticancer Drug Delivery Efficiency with Vascular Permeability of Renal Clearable Versus Non-renal Clearable Nanocarriers. **Angew Chem Int Ed Engl.** 2019 Aug 26;58(35):12076-12080. doi: 10.1002/anie.201905738. Epub 2019 Jul 24. PubMed PMID: 31278873.
138.	Lafin JT, Singla N, Woldu SL, Lotan Y, Lewis CM, Majmudar K, Savelyeva A, **Kapur P**, Margulis V, Strand DW, Murray MJ, Amatruda JF, Bagrodia A. Serum

	MicroRNA-371a-3p Levels Predict Viable Germ Cell Tumor in Chemotherapy-naïve Patients Undergoing Retroperitoneal Lymph Node Dissection. **Eur Urol.** 2020 Feb;77(2):290-292. doi: 10.1016/j.eururo.2019.10.005. Epub 2019 Nov 5. PubMed PMID: 31699528.
139.	Courtney KD, Ma Y, Diaz de Leon A, Christie A, Xie Z, Woolford L, Singla N, Joyce A, Hill H, Madhuranthakam AJ, Yuan Q, Xi Y, Zhang Y, Chang J, Fatunde O,Arriaga Y, Frankel AE, Kalva S, Zhang S, McKenzie T, Reig Torras O, Figlin RA,Rini BI, McKay RM, **Kapur P**, Wang T, Pedrosa I, Brugarolas J. HIF-2 Complex Dissociation, Target Inhibition, and Acquired Resistance with PT2385, a First-in-Class HIF-2 Inhibitor, in Patients with Clear Cell Renal Cell Carcinoma. **Clin Cancer Res.** 2020 Feb 15;26(4):793-803. doi: 10.1158/1078-0432.CCR-19-1459. Epub 2019 Nov 14. PubMed PMID: 31727677; PubMed Central PMCID: PMC7024660.
140.	Duan L, Chen Z, Lu J, Liang Y, Wang M, Roggero CM, Zhang QJ, Gao J, Fang Y, Cao J, Lu J, Zhao H, Dang A, Pong RC, Hernandez E, Chang CM, Hoang DT, Ahn JM, Xiao G, Wang RT, Yu KJ, **Kapur P**, Rizo J, Hsieh JT, Luo J, Liu ZP. Histone lysine demethylase KDM4B regulates the alternative splicing of the androgen receptor in response to androgen deprivation. **Nucleic Acids Res.** 2019 Dec 16;47(22):11623-11636. doi: 10.1093/nar/gkz1004. PubMed PMID: 31647098.
141.	Cai Q, Christie A, Rajaram S, Zhou Q, Araj E, Chintalapati S, Cadeddu J, Margulis V, Pedrosa I, Rakheja D, McKay RM, Brugarolas J**, Kapur P**. Ontological analyses reveal clinically-significant clear cell renal cell carcinoma subtypes with convergent evolutionary trajectories into an aggressive type. **EBioMedicine**. 2020 Jan;51:102526. doi: 10.1016/j.ebiom.2019.10.052. Epub 2019 Dec 16. PubMed PMID: 31859241; PubMed Central PMCID: PMC7000318.
142.	Yeh HC, Margulis V, Singla N, Hernandez E, Panwar V, Woldu SL, Karam JA, Wood CG, Weizer AZ, Raman JD, Remzi M, Rioux-Leclercq N, Haitel A, Roscigno M, Bolenz C, Bensalah K, Li CC, Ke HL, Li WM, Lee HY, Rapoport LM, Lotan Y, **Kapur P**, Shariat SF, Hsieh JT, Wu WJ. PTRF independently predicts progression and survival in multiracial upper tract urothelial carcinoma following radical nephroureterectomy. **Urol Oncol.** 2019 Dec 17. pii: S1078-1439(19)30483-1. doi:10.1016/j.urolonc.2019.11.010. [Epub ahead of print] PubMed PMID: 31862213.
143.	Trivedi HM, Singla N, Lafin J, Fetzer D, **Kapur P**, Bagrodia A. First Do No Harm: A Cautious, Risk-adapted Approach to Testicular Cancer Patients. **Rev Urol.** 2020;22(2):85-89. PMID: 32760234
144.	Singla N, Xie Z, Zhang Z, Gao M, Yousuf Q, Onabolu O, McKenzie T, Tcheuyap VT, Ma Y, Choi J, McKay R, Christie A, Torras OR, Bowman IA, Margulis V, Pedrosa I, Przybycin C, Wang T, **Kapur P**, Rini B, Brugarolas J. Pancreatic tropism of metastatic renal cell carcinoma. **JCI Insight.** 2020 Apr 9;5(7):e134564. doi: 10.1172/jci.insight.134564. PMID: 32271170
145.	Cai Q, Christie A, Rajaram S, Zhou Q, Araj E, Chintalapati S, Singla N, Cadeddu J, Margulis V, Pedrosa I, Rakheja D, McKay RM, Brugarolas J, **Kapur P**. Corrigendum to "Ontological analyses reveal clinically-significant clear cell renal cell carcinoma subtypes with convergent evolutionary trajectories into an aggressive type" [EBioMedicine 51 (2020) 102526]. **EBioMedicine.** 2020 May;55:102707. doi: 10.1016/j.ebiom.2020.102707. Epub 2020 Apr 24. PMID: 32339934
146.	Le S, Chang CM, Nguyen T, Liu Y, Chen YA, Hernandez E, **Kapur P,** Hsieh JT, Johnston K, Dong X. Anticancer Efficacy of Oral Docetaxel Nanoformulation for Metronomic Chemotherapy in Metastatic Lung Cancer. **J Biomed Nanotechnol.** 2020 May 1;16(5):583-593. doi: 10.1166/jbn.2020.2925. PMID: 32919479
147.	Dwivedi DK, Xi Y, **Kapur P**, Madhuranthakam AJ, Lewis MA, Udayakumar D, Rasmussen R, Yuan Q, Bagrodia A, Margulis V, Fulkerson M, Brugarolas J, Cadeddu JA, Pedrosa I. Magnetic Resonance Imaging Radiomics Analyses for Prediction of High-Grade Histology and Necrosis in Clear Cell Renal Cell Carcinoma: Preliminary Experience. **Clin Genitourin Cancer.** 2021 Feb;19(1):12-21.e1. doi: 10.1016/j.clgc.2020.05.011. Epub 2020 May 23. PMID: 32669212
148.	Setoodeh S, Palsgrove DN, Park JY, Pedrosa I, **Kapur P**, Jia L. Primary Renal Sarcoma With BCOR-CCNB3 Gene Fusion in an 18-Year-Old Male: A Rare Lesion With a Diagnostic Quandary. **Int J Surg Pathol.** 2021 Apr;29(2):194-197. doi: 10.1177/1066896920941087. Epub 2020 Jul 10.

	PMID: 32648496
149.	Steinberg RL, Rasmussen RG, Johnson BA, Ghandour R, De Leon AD, Xi Y, Yokoo T, Kim S, **Kapur P**, Cadeddu JA, Pedrosa I. Prospective performance of clear cell likelihood scores (ccLS) in renal masses evaluated with multiparametric magnetic resonance imaging. **Eur Radiol.** 2021 Jan;31(1):314-324. doi: 10.1007/s00330-020-07093-0. Epub 2020 Aug 8. PMID: 32770377
150.	Bao JM, Dang Q, Lin CJ, Lo UG, Feldkoren B, Dang A, Hernandez E, Li F, Panwar V, Lee CF, Cen JJ, Guan B, Margulis V, **Kapur P**, Brekken RA, Luo JH, Hsieh JT, Tan WL. SPARC is a key mediator of TGF-β-induced renal cancer metastasis. **J Cell Physiol.** 2021 Mar;236(3):1926-1938. doi: 10.1002/jcp.29975. Epub 2020 Aug 11. PMID: 32780451
151.	Moro L, Simoneschi D, Kurz E, Arbini AA, Jang S, Guaragnella N, Giannattasio S, Wang W, Chen YA, Pires G, Dang A, Hernandez E, **Kapur P**, Mishra A, Tsirigos A, Miller G, Hsieh JT, Pagano M. Epigenetic silencing of the ubiquitin ligase subunit FBXL7 impairs c-SRC degradation and promotes epithelial-to-mesenchymal transition and metastasis. **Nat Cell Biol.** 2020 Sep;22(9):1130-1142. doi: 10.1038/s41556-020-0560-6. Epub 2020 Aug 24. PMID: 32839549
152.	Badia RR, Abe D, Wong D, Singla N, Savelyeva A, Chertack N, Woldu SL, Lotan Y, Mauck R, Ouyang D, Meng X, Lewis CM, Majmudar K, Jia L, **Kapur P**, Xu L, Frazier AL, Margulis V, Strand DW, Coleman N, Murray MJ, Amatruda JF, Lafin JT, Bagrodia A. Real-World Application of Pre-Orchiectomy miR-371a-3p Test in Testicular Germ Cell Tumor Management. **J Urol.** 2021 Jan;205(1):137-144. doi: 10.1097/JU.0000000000001337. Epub 2020 Aug 28. PMID: 32856980
153.	Patel V, Elias R, Formella J, Schwartzman W, Christie A, Cai Q, Malladi V, **Kapur P**, Vazquez M, McKay R, Pedrosa I, Hannan R, Hammers H, Brugarolas J. Acute interstitial nephritis, a potential predictor of response to immune checkpoint inhibitors in renal cell carcinoma. **J Immunother Cancer.** 2020 Oct;8(2):e001198. doi: 10.1136/jitc-2020-001198. PMID: 33139246
154.	Brugarolas J, Rajaram S, Christie A, **Kapur P**. The Evolution of Angiogenic and Inflamed Tumors: The Renal Cancer Paradigm. **Cancer Cell.** 2020 Dec 14;38(6):771-773. doi: 10.1016/j.ccell.2020.10.021. Epub 2020 Nov 5. PMID: 33157049
155.	**Kapur P**, Rakheja D. Basic Histopathologic Assessment of Germ Cell Tumors for Clinic and Research. **Methods Mol Biol.** 2021;2195:1-11. doi: 10.1007/978-1-0716-0860-9_1. PMID: 32852753
156.	Trpkov K, Williamson SR, Gill AJ, Adeniran AJ, Agaimy A, Alaghehbandan R, Amin MB, Argani P, Chen YB, Cheng L, Epstein JI, Cheville JC, Comperat E, da Cunha IW, Gordetsky JB, Gupta S, He H, Hirsch MS, Humphrey PA, **Kapur P**, Kojima F, Lopez JI, Maclean F, Magi-Galluzzi C, McKenney JK, Mehra R, Menon S, Netto GJ, Przybycin CG, Rao P, Rao Q, Reuter VE, Saleeb RM, Shah RB, Smith SC, Tickoo S, Tretiakova MS, True L, Verkarre V, Wobker SE, Zhou M, Hes O. Novel, emerging and provisional renal entities: The Genitourinary Pathology Society (GUPS) update on renal neoplasia. **Mod Pathol.** 2021 Feb 1. doi: 10.1038/s41379-021-00737-6. Epub ahead of print. Erratum in: Mod Pathol. 2021 Mar 16;: PMID: 33526874.
157.	Margulis V, Freifeld Y, Pop LM, Manna S, **Kapur P**, Pedrosa I, Christie A, Mohamad O, Mannala S, Singla N, Wait M, Bagrodia A, Woldu SL, Gahan J, Brugarolas J, Timmerman R, Hannan R. Neoadjuvant SABR for Renal Cell Carcinoma Inferior Vena Cava Tumor Thrombus-Safety Lead-in Results of a Phase 2 Trial. **Int J Radiat Oncol Biol Phys.** 2021 Feb 5:S0360-3016(21)00163-2. doi: 10.1016/j.ijrobp.2021.01.054. Epub ahead of print. PMID: 33549705.
158.	Choueiri TK, Atkins MB, Bakouny Z, Carlo MI, Drake CG, Jonasch E, **Kapur P**, Lewis B, Linehan WM, Mitchell MJ, Pal SK, Pels K, Poteat S, Rathmell WK, Rini BI, Signoretti S, Tannir N, Uzzo R, Wood CG, Hammers HJ. Summary From the First Kidney Cancer Research Summit, September 12-13, 2019: A Focus on Translational Research. **J Natl Cancer Inst.** 2021 Mar 1;113(3):234-243. doi: 10.1093/jnci/djaa064. PMID: 32359162; PMCID: PMC7936057.

159.	Trpkov K, Hes O, Williamson SR, Adeniran AJ, Agaimy A, Alaghehbandan R, Amin MB, Argani P, Chen YB, Cheng L, Epstein JI, Cheville JC, Comperat E, da Cunha IW, Gordetsky JB, Gupta S, He H, Hirsch MS, Humphrey PA, **Kapur P**, Kojima F, Lopez JI, Maclean F, Magi-Galluzzi C, McKenney JK, Mehra R, Menon S, Netto GJ, Przybycin CG, Rao P, Rao Q, Reuter VE, Saleeb RM, Shah RB, Smith SC, Tickoo S, Tretiakova MS, True L, Verkarre V, Wobker SE, Zhou M, Gill AJ. New developments in existing WHO entities and evolving molecular concepts: The Genitourinary Pathology Society (GUPS) update on renal neoplasia. **Mod Pathol.** 2021 Mar 4. doi: 10.1038/s41379-021-00779-w. Epub ahead of print. PMID: 33664427.
160.	Trpkov K, Williamson SR, Gill AJ, Adeniran AJ, Agaimy A, Alaghehbandan R, Amin MB, Argani P, Chen YB, Cheng L, Epstein JI, Cheville JC, Comperat E, da Cunha IW, Gordetsky JB, Gupta S, He H, Hirsch MS, Humphrey PA, **Kapur P**, Kojima F, Lopez JI, Maclean F, Magi-Galluzzi C, McKenney JK, Mehra R, Menon S, Netto GJ, Przybycin CG, Rao P, Rao Q, Reuter VE, Saleeb RM, Shah RB, Smith SC, Tickoo S, Tretiakova MS, True L, Verkarre V, Wobker SE, Zhou M, Hes O. Correction to: Novel, emerging and provisional renal entities: the Genitourinary Pathology Society (GUPS) update on renal neoplasia. **Mod Pathol.** 2021 May;34(5):1037. doi: 10.1038/s41379-021-00775-0. Erratum for: Mod Pathol. 2021 Feb 1;: PMID: 33727698.
161.	Lafin JT, Kenigsberg AP, Meng X, Abe D, Savelyeva A, Singla N, Woldu SL, Lotan Y, Mauck RJ, Lewis CM, Margulis V, Wong D, Jia L, **Kapur P**, Xu L, Speir RW, Chesnut GT, Frazier AL, Strand DW, Coleman N, Murray MJ, Amatruda JF, Bagrodia A. Serum Small RNA Sequencing and miR-375 Assay Do Not Identify the Presence of Pure Teratoma at Postchemotherapy Retroperitoneal Lymph Node Dissection. **Eur Urol Open Sci.** 2021 Apr;26:83-87. doi: 10.1016/j.euros.2021.02.003. Epub 2021 Mar 5. PMID: 33997822; PMCID: PMC8121258.
162.	**Kapur P**, Gao M, Zhong H, Rakheja D, Cai Q, Pedrosa I, Margulis V, Xu L, Kinch L, Brugarolas J. Eosinophilic Vacuolated Tumor of the Kidney: A Review of Evolving Concepts in This Novel Subtype With Additional Insights From a Case With MTOR Mutation and Concomitant Chromosome 1 Loss. **Adv Anat Pathol.** 2021 Jul 1;28(4):251-257. doi: 10.1097/PAP.0000000000000299. PMID: 34009776; PMCID: PMC8205969.
163.	**Kapur P**, Setoodeh S, Araj E, Yan J, Malladi VS, Cadeddu JA, Christie A, Brugarolas J. Improving Renal Tumor Biopsy Prognostication With BAP1 Analyses. **Arch Pathol Lab Med**. 2021 May 21. doi: 10.5858/arpa.2020-0413-OA. Epub ahead of print. PMID: 34019633.
164.	He L, Metter C, Margulis V, **Kapur P**. A Review Leveraging a Rare and Unusual Case of Basal Cell Carcinoma of the Prostate. **Case Rep Pathol**. 2021 May 4;2021:5520581. doi: 10.1155/2021/5520581. PMID: 34035971; PMCID: PMC8116143.
165.	Carter P, Schnell U, Chaney C, Tong B, Pan X, Ye J, Mernaugh G, Cotton JL, Margulis V, Mao J, Zent R, Evers BM, **Kapur P**, Carroll TJ. Deletion of Lats1/2 in adult kidney epithelia leads to renal cell carcinoma. **J Clin Invest**. 2021 Jun 1;131(11):e144108. doi: 10.1172/JCI144108. PMID: 34060480; PMCID: PMC8159698.
166.	**Kapur P**, Christie A, Rajaram S, Brugarolas J. What morphology can teach us about renal cell carcinoma clonal evolution. **Kidney Cancer J**. 2020 Sep;18(3):68-76. PMID: 34178206; PMCID: PMC8232548.
167.	Udayakumar D, Zhang Z, Xi Y, Dwivedi DK, Fulkerson M, Haldeman S, McKenzie T, Yousuf Q, Joyce A, Hajibeigi A, Notgrass H, de Leon AD, Yuan Q, Lewis MA, Madhuranthakam AJ, Sibley RC, Elias R, Guo J, Christie A, McKay RM, Cadeddu JA, Bagrodia A, Margulis V, Brugarolas J, Wang T, **Kapur P**, Pedrosa I. Deciphering Intratumoral Molecular Heterogeneity in Clear Cell Renal Cell Carcinoma with a Radiogenomics Platform. **Clin Cancer Res**. 2021 Sep 1;27(17):4794-4806. doi: 10.1158/1078-0432.CCR-21-0706. Epub 2021 Jul 1. PMID: 34210685; PMCID: PMC8493519.
168.	**Kapur P**, Gao M, Zhong H, Chintalapati S, Mitui M, Barnes SD, Zhou Q, Miyata J, Carrillo D, Malladi VS, Rakheja D, Pedrosa I, Xu L, Kinch L, Brugarolas J. Germline and sporadic mTOR pathway mutations in low-grade oncocytic tumor of the kidney. **Mod Pathol**. 2022 Mar;35(3):333-343. doi: 10.1038/s41379-021-00896-6. Epub 2021 Sep 20. PMID: 34538873.

169.	Hannan R, Mohamad O, Diaz de Leon A, Manna S, Pop LM, Zhang Z, Mannala S, Christie A, Christley S, Monson N, Ishihara D, Hsu EJ, Ahn C, **Kapur P**, Chen M, Arriaga Y, Courtney K, Cantarel B, Wakeland EK, Fu YX, Pedrosa I, Cowell L, Wang T, Margulis V, Choy H, Timmerman RD, Brugarolas J. Outcome and Immune Correlates of a Phase II Trial of High-Dose Interleukin-2 and Stereotactic Ablative Radiotherapy for Metastatic Renal Cell Carcinoma. **Clin Cancer Res**. 2021 Dec 15;27(24):6716-6725. doi: 10.1158/1078-0432.CCR-21-2083. Epub 2021 Sep 22. PMID: 34551906.
170.	Kim K, Zhou Q, Christie A, Stevens C, Ma Y, Onabolu O, Chintalapati S, Mckenzie T, Tcheuyap VT, Woolford L, Zhang H, Singla N, Parida PK, Marquez-Palencia M, Pedrosa I, Margulis V, Sagalowsky A, Xie Z, Wang T, Durinck S, Modrusan Z, Seshagiri S, **Kapur P**, Brugarolas J, Malladi S. Determinants of renal cell carcinoma invasion and metastatic competence. **Nat Commun**. 2021 Oct 4;12(1):5760. doi: 10.1038/s41467-021-25918-4. PMID: 34608135; PMCID: PMC8490399.
171.	Elias R, Tcheuyap VT, Kaushik AK, Singla N, Gao M, Reig Torras O, Christie A, Mulgaonkar A, Woolford L, Stevens C, Kettimuthu KP, Pavia-Jimenez A, Boroughs LK, Joyce A, Dakanali M, Notgrass H, Margulis V, Cadeddu JA, Pedrosa I, Williams NS, Sun X, DeBerardinis RJ, Öz OK, Zhong H, Seshagiri S, Modrusan Z, Cantarel BL, **Kapur P**, Brugarolas J. A renal cell carcinoma tumorgraft platform to advance precision medicine. **Cell Rep**. 2021 Nov 23;37(8):110055. doi: 10.1016/j.celrep.2021.110055. PMID: 34818533; PMCID: PMC8762721.
172.	Reig Torras O, Mishra A, Christie A, McKenzie T, Onabolu O, Singla N, Plimack ER, Suárez C, Ornstein MC, Alpaugh RK, Elias R, Bowman IA, McKay RM, Przybycin C, **Kapur P**, Brugarolas J, Rini B. Molecular Genetic Determinants of Shorter Time on Active Surveillance in a Prospective Phase 2 Clinical Trial in Metastatic Renal Cell Carcinoma. **Eur Urol**. 2021 Dec 31:S0302-2838(21)02211-9. doi: 10.1016/j.eururo.2021.12.003. Epub ahead of print. PMID: 34980496.
173.	Motzer RJ, Jonasch E, Agarwal N, Alva A, Baine M, Beckermann K, Carlo MI, Choueiri TK, Costello BA, Derweesh IH, Desai A, Ged Y, George S, Gore JL, Haas N, Hancock SL, **Kapur P**, Kyriakopoulos C, Lam ET, Lara PN, Lau C, Lewis B, Madoff DC, Manley B, Michaelson MD, Mortazavi A, Nandagopal L, Plimack ER, Ponsky L, Ramalingam S, Shuch B, Smith ZL, Sosman J, Dwyer MA, Gurski LA, Motter A. Kidney Cancer, Version 3.2022, NCCN Clinical Practice Guidelines in Oncology. **J Natl Compr Canc Netw**. 2022 Jan;20(1):71-90. doi: 10.6004/jnccn.2022.0001. PMID: 34991070.
174.	Lee CF, Chen YA, Hernandez E, Pong RC, Ma S, Hofstad M, **Kapur P**, Zhau H, Chung LW, Lai CH, Lin H, Lee MS, Raj GV, Hsieh JT. The central role of Sphingosine kinase 1 in the development of neuroendocrine prostate cancer (NEPC): A new targeted therapy of NEPC. **Clin Transl Med**. 2022 Feb;12(2):e695. doi: 10.1002/ctm2.695. PMID: 35184376.

Reviews, Chapters, Monographs and Editorials

1.	**Kapur P**. Tailoring treatment of rectal adenocarcinoma: immunohistochemistry for predictive biomarkers. **Anticancer Drugs**. 2011 Anticancer Drugs. 2011 Apr;22(4):362-70. PubMed PMID: 21233707.
2.	**Kapur P**. Predictive biomarkers for response to therapy in advanced colorectal/rectal adenocarcinoma. **Crit Rev Oncog**. 2012;17(4):361-72. PubMed PMID: 23176043.
3.	Sharma V, **Kapur P**, Olweny E, Cadeddu J, Roehrborn CR, Liu H. Auto-fluorescence lifetime spectroscopy for prostate cancer detection: An optical biopsy approach. ***Digital Holography and Three-Dimensional Imaging****, DH 2012.* 2012. Chapter in Book/Report/Conference.
4.	Sharma V, **Kapur P**, Olweny E, Cadeddu J, Roehrborn CR, Liu H. Auto-fluorescence lifetime spectroscopy for prostate cancer detection: An optical biopsy approach. ***Biomedical Optics****,* ***BIOMED*** *2012.* 2012. Chapter in Book/Report/Conference.
5.	Ananthakrishnan L, **Kapur P**, Leyendecker JR. The spectrum of renal cell carcinoma in adults. **Abdom Radiol** (NY). 2016 Jun;41(6):1052-65. PubMed PMID: 27108133.
6.	de Leon AD, **Kapur P**, Pedrosa I. Radiomics in Kidney Cancer: MR Imaging. MagnReson Imaging Clin N Am.2019 Feb;27(1):113.doi:10.1016/j.mric.2018.08.005.Review. PubMed PMID: 30466904.

7.	Kapur P and Dinesh Rakheja. Basic Histopathologic Assessment of Germ Cell Tumors for Clinic and Research

Books/Textbooks

1.	**Kapur P.** Breast Carcinoma - Cytological grade and correlation with receptor and oncogene expression on fine needle aspiration. Delhi University. 1999 (Dissertation during Pathology Residency in India).

Case Reports

1.	Rakheja D, **Kapur P**, Milchgrub S, Hoang MP. Pathologic quiz case: a woman with right facial nerve paralysis. Endolymphatic sac tumor associated with von Hippel-Lindau disease. **Arch Pathol Lab Med**. 2003 Oct;127(10):1387-8. PubMed PMID:14521446.
2.	**Kapur P**, Sarode V. Pathologic quiz case: myxoid tibial lesion in a 31-year-old man. Low-grade myxofibrosarcoma. **Arch Pathol Lab Med**. 2004 Apr;128(4):e65-6. PubMed PMID: 15043472.
3.	**Kapur P**, Treat K, Chuang AT, Hoang MP. Pathologic quiz case: paratesticular mass in a young man. Inflammatory myofibroblastic tumor of the paratestis. **Arch Pathol Lab Med**. 2004 May;128(5):589-90. PubMed PMID: 15086293.
4.	**Kapur P**, Rakheja D, Hoang MP. Pathologic quiz case: laryngeal lesion in an elderly man. Verrucous carcinoma of the larynx. **Arch Pathol Lab Med**. 2005 Jan;129(1):115-6. PubMed PMID: 15628892.
5.	**Kapur P**, Rakheja D, Bastasch M, Molberg KH, Sarode VR. Primary mucinous adenocarcinoma of the thymus: a case report and review of the literature. **Arch Pathol Lab Med**. 2006 Feb;130(2):201-4. PubMed PMID: 16454563.
6.	**Kapur P**, Rakheja D, Cavuoti DC, Johnson-Welch SF. Sclerosing lobular hyperplasia of breast: cytomorphologic and histomorphologic features: a case report. **Cytojournal**. 2006 Apr 3;3:8. PubMed PMID: 16584551; PubMed Central PMCID: PMC1450301.
7.	**Kapur P**, Rakheja D, Amirkhan RH . Acute-onset, bilateral lower extremity pain in a 30-year-old man. **Lab Med** 2006; 37(9): 533-5. S*econd place winner, LabMedicine Case Study Competition*, *2006*.
8.	Bogusz AM, Hussey SM, **Kapur P**, Peng Y, Gokaslan ST. Massive localized lymphedema with unusual presentations: report of 2 cases and review of the literature. **Int J Surg Pathol**. 2011 Apr;19(2):212-6. PubMed PMID: 18611926.
9.	Li HC, Patel P, **Kapur P**, Huerta S. Metastatic rectal cancer to the breast. **Rare Tumors**. 2009 Jul 22;1(1):e22. PubMed PMID: 21139894; PubMed Central PMCID: PMC2994444.
10.	Wassef SN, **Kapur P**, Barnett SL, Myers LL. Sinonasal teratocarcinosarcoma with intracranial extension: case report and literature review. **Ear Nose Throat J**. 2012 Dec;91(12):536-9. PubMed PMID: 23288820.
11.	**Kapur P**, Rakheja D, Truelson J, Molberg K. Malignant melanoma in carcinoma ex pleomorphic adenoma of the parotid gland. **Ear, Nose and Throat Journal**.
12.	Lev-Cohain N, **Kapur P**, Pedrosa I. Vulvar fibroadenoma with lactational changes in ectopic breast tissue. **Case Rep Obstet Gynecol**. 2013;2013:924902. PubMed PMID: 24222874; PubMed Central PMCID: PMC3810074.
13.	Wang CJ, Ying J, **Kapur P**, Wohlfeld B, Roehrborn C, Kim DW. Solitary recurrence of castration-resistant prostate cancer with low or undetectable levels of prostate specific antigen salvaged with local ablative radiation therapy: A case report. **Oncology Letters**. 2016 Jan; 11(1):713-716. PMID: 26870272
14.	Friedman P, Costa D, **Kapur P**. Foamy gland high-grade prostatic intraepithelial neoplasia on core biopsy and subsequent radical prostatectomy: An in depth case report of a rare variant. Human Pathology: **Case Reports**. Noc 2017;10:32-36.
15.	Woldu SL, Brugarolas J, **Kapur P**, Margulis V. What is the role of nephrectomy following complete response to checkpoint inhibitors? **Urol Case Rep**. 2018 Mar 14;18:60-63. doi:

	10.1016/j.eucr.2018.02.016. eCollection 2018 May. PubMed PMID: 29785372; PubMed Central PMCID: PMC5958820.
16.	Jia L, Panwar V, Parmley M, Lucas E, Pedrosa I, **Kapur P**. Retroperitoneal Sclerosing Angiomyolipoma with Long-Term Follow up: A Case Report with Unique Clinicopathologic and Genomic Profile. **Int J Surg Pathol**. 2021 Jun 9:10668969211021483. doi: 10.1177/10668969211021483. Epub ahead of print. PMID: 34106015.

Proceedings of Meetings

1.	Durbin DM, Hatfield J, **Kapur P**, Rogers BB, Ramilo O, Jafri HS. Ribavirin modulates pro-Inflammatory cytokines and disease Severity in a murine model of respiratory syncytial virus pneumonia. Pediatric Academic Societies' Annual Meeting, Baltimore, MD, May 2002. (Poster)
2.	**Kapur P**, Bowers D, Gargan L, Reisch J, Margraf L. MIB-1 labeling index predicts progression free survival in a large group of pediatric pilocytic astrocytomas. *Pediatr Dev Pathol* 5(6): 602-607, 2002 (Abstract). The Society for Pediatric Pathology Interim Meeting, Dallas, TX, September 2002. (Platform)
3.	**Kapur P**, Rakheja D, Rogers BB. Characterization of inflammation in villitis of known and unknown etiologies: A fluorescence in situ hybridization (FISH) and immunohistochemical evaluation. *Pediatr Dev Pathol* 5(6): 602-607, 2002 (Abstract). The Society for Pediatric Pathology Interim Meeting, Dallas, TX, September 2002. (Platform) *Gordon L. Vawter Pathologist-in-training Award.*
4.	Chavez-Bueno S, Mejias A, Rios AM, Hatfield J, **Kapur P**, Rogers BB, Ramilo O, Jafri HS. Persistence of airway hyperresponsiveness (AHR) after resolution of acute respiratory syncytial virus (RSV) disease in a murine model without allergic sensitization. Interscience conference on antimicrobial agents and chemotherapy, San Diego, CA, September 27-30, 2002. (Poster)
5.	Rakheja D, **Kapur P**, Timmons CF. Immunohistochemical expression of fatty acid synthase in medulloblastomas and neuroblastic tumors. *Lab Invest* 83(1): 7P, 2003 (Abstract). The Society for Pediatric Pathology Spring Meeting, Washington, DC, March 2003. (Poster)
6.	Mejías A, Chávez- Bueno S, Ríos A, Saavedra J, Hatfield J, **Kapur P**, Rogers BB, Jafri HS, Ramilo O. Anti-RSV neutralizing antibody decreases lung inflammation, airway obstruction and airway hyperresponsiveness (AHR) in the respiratory syncytial virus (RSV) murine model. Pediatric Academic Societies Annual Meeting, Seattle, WA, May 04, 2003. (Poster)
7.	Chávez-Bueno S, Mejias A, Rios AM, Hatfield J, **Kapur P,** Gomez A, Rogers BB, Ramilo O, Jafri HS. Respiratory syncytial virus **(**RSV) induces persistence of airway hyperresponsiveness (AHR) and histopathologic changes in both Balb/c and C57BL/6 mice without allergic pre-sensitization. Pediatric Academic Societies Annual Meeting, Seattle, WA, May 04, 2003. (Poster)
8.	**Kapur P**, Rakheja D, Timmons CF, Margraf LR, Wilson KS, Elder F. Mosaic variegated aneuploidy: a case report. Interim Meeting of the Society for Pediatric Pathology, Little Rock, AR, October 2004. *Resident's Case Presentation Award.*
9.	Rakheja D, **Kapur P**, Margraf LR. Inactivation of DNA mismatch repair genes, *hMLH1* and *hMSH2*, does not play a role in the tumorigenesis of pediatric renal cell carcinomas with Xp11.2 rearrangements. Interim Meeting of the Society for Pediatric Pathology, Little Rock, AR, October 2004. (Poster)
10.	**Kapur P**, Kroft SH, Molberg KH and Hoang MP. Solitary plasmacytoma of thyroid gland; a case report. 83rd Annual Meeting of the Texas Society of Pathologists, Dallas, TX, January 2004. (Poster)
11.	Rakheja D, **Kapur P**, Hoang MP, Bennett MJ. Increased ratio of saturated to unsaturated C18 fatty acids in colonic adenocarcinoma. 83rd Annual Meeting of the Texas Society of Pathologists, Dallas, TX, January 2004. (Poster)
12.	Rakheja D, **Kapur P**, Hoang MP, Bennett MJ. Colonic adenocarcinomas show increased ratio of saturated to unsaturated C18 fatty acids when compared to normal colonic mucosa. Annual Meeting of the United States and Canadian Academy of Pathology, San Antonio, TX, February-March 2005. (Poster)

13.	**Kapur P**, Rakheja D, Roy LC, Hoang MP. Fatty acid synthase expression in melanocytic lesions. Annual Meeting of the United States and Canadian Academy of Pathology, San Antonio, TX, February-March 2005. (Poster)
14.	Erickson C, **Kapur P**, Rakheja D, Carder KR, Hoang MP. Congenital self-healing reticulohistiocytosis (Hashimoto-Pritzker disease): 10-year experience at Dallas Children's Medical Center. Annual Meeting of the American Society of Dermatopathology, Chicago, IL, October 2006. (Poster)
15.	**Kapur P**, Margraf LR, Rakheja D. Effect of fixatives on nuclear proteomic analyses using 2-d protein electrophoresis. Annual Meeting of the Texas Society of Pathologists, Houston, TX, January 2006. (Poster) *2nd Position in Poster Competition*.
16.	**Kapur P**, Rakheja D, Molberg KH, Leitch AM, Sarode VR. Sentinel lymph node micrometastasis from breast carcinoma: is it an indication for completion axillary dissection? Annual Meeting of the Texas Society of Pathologists, Houston, TX, January 2006. (Poster)
17.	**Kapur P**, Rakheja D, Balani J, Roy LC, Amirkhan RH, Hoang MP. Phosphorylated histone H3, Mib-1, p21, fatty acid synthase, and cleaved caspase-3 expression in granular cell tumors. Annual Meeting of the Texas Society of Pathologists, Houston, TX, January 2006. (Poster)
18.	**Kapur P**, Margraf LR, Rakheja D. Effect of fixatives on nuclear protein extraction and proteomic analyses using two-dimensional protein electrophoresis. Mod Pathol 19(Suppl 1): 330A. Annual Meeting of the United States and Canadian Academy of Pathology, Atlanta, GA, February 2006. (Poster)
19.	Rakheja D, **Kapur P**, Hoang MP, Bennett MJ. Colonic adenocarcinomas show increased ratio of saturated to unsaturated C18 fatty acids when compared to normal colonic mucosa. Annual Meeting of the United States and Canadian Academy of Pathology, San Antonio, TX, February-March 2005. (Poster)
20.	Agata M. Bogusz, Sean M. Hussey, **Payal Kapur,** and Tunc Gokaslan. Myxoid areas and delicate vascular network as pitfalls in diagnosis of MLL. Annual CAP meeting, Chicago, IL, October 2007 (poster)
21.	Rakheja D, Chen W, Ashfaq R, McKenna RW, **Kapur P**. Uniform strong expression of the anti-apoptotic protein survivin in pediatric classical Hodgkin lymphoma. Annual Meeting of the United States and Canadian Academy of Pathology, Denver, CO, March 2008. (Platform)
22.	**Kapur P**, Rakheja D, Wang HY, Ashfaq R, McKenna RW, Chen W. Nearly uniform expression of Id2 and Notch-1, suppressors of B-cell specific gene expression, in pediatric classical Hodgkin lymphoma. Annual Meeting of the United States and Canadian Academy of Pathology, Denver, CO, March 2008.
23.	Chen W, **Kapur P**, Ashfaq R, Hladik C, Shang P, McKenna RW, Rakheja D. Alterations in cell cycle checkpoints in Hodgkin/Reed-Sternberg cells of pediatric classical Hodgkin lymphoma: a tissue microarray-based study. Annual Meeting of the Society for Pediatric Pathology, Denver, CO, February-March 2008.
24.	Butt Y, Kamrudin S, **Kapur P**, Chen W, Rakheja D. Strong immunohistochemical expression of X-linked inhibitor of apoptosis in neuroblastoma, Wilms tumor, and pediatric classical Hodgkin lymphoma. Annual Meeting of the Society for Pediatric Pathology, Denver, CO, February-March 2008.
25.	Nazarian RM, **Kapur P**, Piris A, Mihm MC, Hoang MP. Expression of Ki-67 in Benign, Atypical, and Malignant Hidradenomas. Annual Meeting of the United States and Canadian Academy of Pathology, Boston, MA, March 2009.
26.	Gupta S, Ashfaq A, **Kapur P**, Afonso B, Nguyen T, Boland CR, Goel A, Rockey DC. Microsatellite instability may be uncommon among Hispanics with colorectal cancer. Digestive Disease Week, Chicago, IL, 2009 (published in Gastroenterology)
27.	Duan L, Youssef R, Margulis V, Lotan Y, Koduru P, Kabbani W and **Kapur P**. Clear Cell Papillary Renal Cell Carcinoma: Clinicopathologic, Immunohistochemical, and Molecular Analysis. North Texas Meeting, Nov 2010 in Dallas Texas, TX

28.	Cockburn A, Youssef R, Kabbani W, Sharia S, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y and **Kapur P**. Apoptotic markers in Bilharzial related invasive bladder cancer. American Society for Clinical Pathology Annual meeting, October 27-31 2010 in San Francisco, CA.
29.	Morris D, Youssef R, Sharia S, King E, Kabbani W, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y and **Kapur P**. Expression of multiple biomarkers in bilharzial related urothelial cancer. American Society for Clinical Pathology Annual meeting, October 27-31 2010 in San Francisco, CA.
30.	Cockburn A, Youssef R, Sharia S, King E, Kabbani W, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y and **Kapur P**. Expression of Cell Cycle-Related Molecular Markers in Patients With Nonmetastatic Squamous Cell Carcinoma of the Bladder. College of American Pathologist Annual meeting, September 2010 in Chicago, IL.
31.	King K, Youssef R, Sharia S, Kabbani W, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y and **Kapur P.** Expression of Multiple Biomarkers in Bilharzial-Related Urothelial Carcinoma. College of American Pathologist Annual Meeting, September 2010 in Chicago, IL.
32.	King E, Youssef R, Kabbani W, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y and **Kapur P**. Adenocarcinoma of the urinary bladder: value of cell cycle biomarkers. United States and Canadian Academy of Pathology's 99th Annual Meeting, March 20-26, 2010 in Washington, DC.
33.	**Kapur P**, Saha D and Huerta S. Assessment Of Molecular Biomarkers To Predict Response To Chemoradiation in Rectal Adenocarcinomas: A Tissue Microarray Based Study. United States and Canadian Academy of Pathology's 99th Annual Meeting, March 20-26, 2010 in Washington, DC.
34.	Chen W, Issacson T, **Kapur P**, Rakheja D. Expression of Notch Pathway Proteins in Lymphoblastic Leukemia/Lymphoma. United States and Canadian Academy of Pathology's 99th Annual Meeting, March 20-26, 2010 in Washington, DC.
35.	Seegmiller AC, Olson, SJ, **Kapur P**, Rakheja D and Chen W. Increased Expression of Fatty Acid Synthetic Enzymes in Hodgkin and Reed-Sternberg Cells of Classical Hodgkin. United States and Canadian Academy of Pathology's 99th Annual Meeting, March 20-26, 2010 in Washington, DC.
36.	Youssef R, **Kapur P**, Kabbani W, Shariat S, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y Bilharzial Related Bladder cancer: Pathological Characteristics and value of cyclooxygenase-2 expression. American Urologic Association Annual Meeting, May 29th-June 3rd 2010 in San Francisco, CA.
37.	Youssef R, Shariat S, Kabbani W, **Kapur P**, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y Expression of cyclooxygenase-2 in squamous cell carcinoma In the urinary bladder. American Urologic Association Annual Meeting, May 29th-June 3rd 2010 in San Francisco, CA.
38.	Rakheja D, **Kapur P**, Chen W. Expression of Notch Pathway Proteins in Hodgkin/Reed-Sternberg Cells of Classical Hodgkin Lymphoma. United States and Canadian Academy of Pathology's 99th Annual Meeting, March 20-26, 2010 in Washington, DC.
39.	Bachoo RM, Marin-Valencia I, Cho SK, Rakheja D, Hatanpaa KJ, Mashimo T, Vemireddy V, **Kapur P**, Good LB, Sun X, Pascual JM, Takahashi M, Togao O, Raisanen J, Maher EA, DeBerardinis RJ, Malloy CR. Glucose metabolism via the pentose phosphate pathway, glycolysis, and citric acid cycle in an orthotopic mouse model of human brain tumors. Annual Scientific Meeting of the Society for Neuro-Oncology in Conjunction with the AANS/CNS Section on Tumors, Garden Grove, Orange county, CA, November 2011.
40.	Youssef R, **Kapur P**, Arendt T, Mosbah A, Abol-Enein H, Ghoniem M and Lotan Y. Prognostic value of apoptotic markers in squamous cell carcinoma of the bladder. Society of Urologic Oncology's Annual Meeting, Nov 30-Dec 2, 2011 in Bethesda, Maryland.
41.	Darwish O, Youssef R, **Kapur P**, Bagrodia A, Belsante M, Alhalabi F, Lotan Y and Margulis V. Clear cell renal cell carcinoma: Can tissue biomarkers predict prognosis. Society of Urologic Oncology's Annual Meeting, Nov 30-Dec 2, 2011 in Bethesda, Maryland.
42.	Bagrodia A, Youssef R, Cannon C, Darwish O, Belsante M, **Kapur P**, Lotan Y and Margulis V. Prospective evaluation of cell cycle biomarkers for prediction of cancer-specific mortality in patients with upper tract urothelial carcinoma. Society of Urologic Oncology's Annual Meeting, Nov 30-Dec 2, 2011 in Bethesda, Maryland.

43.	Belsante M, Youssef R, Darwish O, Bagrodia A, **Kapur P**, Alhalabi F, Margulis V, and Lotan Y. Prognostic role of lymphovascular invasion in clear cell renal cell carcinoma. Society of Urologic Oncology's Annual Meeting, Nov 30-Dec 2, 2011 in Bethesda, Maryland.
44.	**Kapur P**, Youssef R, Alhalabi F, Margulis V, Lotan Y and Kabbani. W Clinicopathologic Characteristics and Outcomes of Renal Cell Carcinoma: A Single Center Experience. United States and Canadian Academy of Pathology's Annual Meeting, February 26 - March 4, 2011 in San Antonio, TX
45.	**Kapur P**, Rakheja R, Youssef R, Margulis V, Kabbani W, and Lotan Y. Prognostic Significance Of MTORC1 Immunoexpression In Clear Cell (Conventional) Renal Cell Carcinoma. United States and Canadian Academy of Pathology's Annual Meeting, February 26 - March 4, 2011 in San Antonio, TX
46.	Duan L, Youssef R, Margulis V, Lotan Y, Koduru P, Kabbani W and **Kapur P**. Clear Cell Papillary Renal Cell Carcinoma: Clinicopathologic, Immunohistochemical, and Molecular Analysis. United States and Canadian Academy of Pathology's Annual Meeting, February 26 - March 4, 2011 in San Antonio, TX
47.	Duan L, Youssef R, Margulis, V, Lotan Y, Koduru P, Kabbani W, and **Kapur P**. Renal Cell Carcinoma with Extensive Clear Cell Component and Papillary Architecture: Value of Immunohistochemistry. United States and Canadian Academy of Pathology's Annual Meeting, February 26 - March 4, 2011 in San Antonio, TX
48.	Phadke P, Rakheja D, Le L, Selim AM, **Kapur P**, Davis A, Mihm M and Hoang M. Proliferative Nodule Arising Within Congenital Melanocytic Nevus: Histologic, Immunohistochemical And Molecular Analyses Of 43 Cases. United States and Canadian Academy of Pathology's Annual Meeting, February 26 - March 4, 2011 in San Antonio, TX
49.	Rakheja D, **Kapur P**, Khokhar S, Fustino N, Lotan Y, Brugarolas J, Amatruda JF. MTORC1 signaling pathway is differentially active in yolk sac tumors and seminomas. Annual Meeting of the Society for Pediatric Pathology, San Antonio, TX, February 2011. (Platform)
50.	Margulis V, Youssef R, **Kapur P**, Kabbani W., Alhalabi F, Arendt T, Rakheja D, Lotan Y. The number of aberrantly expressed constituents of the mammalian target of rapamycin pathway: correlation with oncologic outcome in clear cell renal cell carcinoma. American Urologic Association Annual Meeting, May 2011 in Wasington, DC.
51.	Youssef R, **Kapur P**, Kabbani W, Arendt T, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y. Prognostic value of fibroblastic growth factor in squamous cell carcinoma of the bladder. American Urologic Association Annual Meeting, May 2011 in Wasington, DC.
52.	Youssef R, **Kapur P**, Kabbani W, Mosbah A, Abol-Enein H, Ghoniem M, Lotan Y. Expression of cell cycle-related molecular markers in patients treated with radical cystectomy for squamous cell carcinoma of the bladder. American Urologic Association Annual Meeting, May 2011 in Wasington, DC.
53.	Duan L, Youssef R, Margulis V, Lotan Y, Koduru P, Kabbani W and **Kapur P**. Clear Cell Papillary Renal Cell Carcinoma: Clinicopathologic, Immunohistochemical, and Molecular Analysis. Texas Society of Pathology's Annual Meeting, January 14 -16, 2011 in Houston, TX
54.	Duan L, Youssef R, Margulis, V, Lotan Y, Koduru P, Kabbani W, and **Kapur P**. Renal Cell Carcinoma with Extensive Clear Cell Component and Papillary Architecture: Value of Immunohistochemistry. Texas Society of Pathology's Annual Meeting, January 14 -16, 2011 in Houston, TX
55.	Sugianto, J. Z. Rakheja D, Youssef RF, Lotan Y, Margulis V, **Kapur P**. Comparison of mTORC1 pathway immunoexpression between chromophobe renal cell carcinoma and renal oncocytoma. North Texas Society of Pathology's 6th Annual Resident/Fellow Research Forum, Dallas, TX. December 5, 2012. (Oral presentation)
56.	Ramy Youssef, Oussama Darwish, **Payal Kapur**, Aditya Bagrodia, Michael Belsante, Bishoy Gayed, Feras Alhalabi, Yair Lotan and Vitaly Margulis. Alterations In Pten, Hif And Raptor Correlate With Pathogical Features And Oncological Outcomes Of Patients With Papillary Renal Cell Carcinoma. 13th Annual Meeting of the Society Of Urologic Oncology Meeting, Rockville, MD, November 28-30, 2012.

57.	Bishoy Gayed, Ramy Youssef, Oussama Darwish, Aditya Bagrodia, **Payal Kapur**, Arthur Sagalowsky, Yair Lotan, Vitaly Margulis. Increased Expression of Ki-67 is a significant predictor of disease recurrence and decreased survival in patients with Non Metastatic Clear Cell Renal Cancer. 13th Annual Meeting of the Society Of Urologic Oncology Meeting, Rockville, MD, November 28-30, 2012.
58.	Bishoy Gayed, Ramy Youssef, Oussama Darwish, Aditya Bagrodia, **Payal Kapur**, Arthur Sagalowsky, Yair Lotan, Vitaly Margulis Decreased p16, p21, p27, and p57 expression is associated with inferior oncologic outcomes in patients with clear cell renal cell cancer. 13th Annual Meeting of the Society Of Urologic Oncology Meeting, Rockville, MD, November 28-30, 2012.
59.	Hans K. Ghayee; Alessio Giubellino; Arielle Click; **Payal Kapur**; Victoria Martucci; Jerry W. Shay; Rhonda F. Souza; Karel Pacak. p-mTOR is not upregulated in SDHB-related paragangliomas: Relevance to future therapeutic options using mTOR inhibitors. North American Neuroendocrine Tumor Society presents: 2012 Neuroendocrine Tumor Symposium. 2012
60.	D. Kim, V. Tumati, D. Pistenmaa, **P. Kapur**, X. Xie, R. Hannan, C. Jacobs, C. Straka, J. Hsieh, D. Saha. Loss of Tumor Suppressor DAB2IP Correlates With Decreased Biochemical Recurrence-free Survival in High-Risk Prostate Cancer Patients Treated With Radiation Therapy. American Society for Radiation Oncology (ASTRO) 54th Annual Meeting, Boston, MA, October 28-November 1, 2012 International Journal of Radiation Oncology*Biology*Physics, Volume 84, Issue 3, Supplement, 1 November 2012, Page S714.
61.	Ghayee H, **Kapur P** et al. p-mTOR is not upregulated in SDHB-related paragangliomas: Relevance to future therapeutic options using mTOR inhibitors. Oral presentation to the North American Neuroendocrine Tumor Society (NANETS) meeting in San Diego, October 2012
62.	Rakheja D, Fustino NJ, Chen KS, Ateek C, Shukla A, **Kapur P**, Frazier AL, Lum L, Amatruda JF Wnt and BMP pathways contribute to the activation of mTORC1 signaling in pediatric yolk sac tumors.. Innovations in Cancer Prevention and Research Conference, Cancer Prevention and Research Institute of Texas, Austin, TX, October 2012.
63.	Rakheja D, Fustino NJ, Chen KS, Ateek C, Shukla A, **Kapur P**, Frazier AL, Amatruda JF. Wnt and BMP pathways contribute to the preferential activation of mTOR signaling in pediatric yolk sac tumors. Interim Meeting of the Society for Pediatric Pathology, Houston, TX, October 2012. (Platform)
64.	Rakheja D, Fustino NJ, Chen KS, Ateek C, Shukla A, **Kapur P**, Frazier AL, Amatruda JF. Wnt and BMP pathways contribute to the preferential activation of mTOR signaling in pediatric yolk sac tumors. Semi-annual Group Meeting of the Children's Oncology Group, Atlanta, GA, September 2012.
65.	Hiemenz M, Peng Y, **Kapur P.** Potential Prognostic Value of Notch 1 Expression in Triple-negative Breast Carcinoma: A Pilot Tissue Microarray Study. International conference on Translational Medicine" (Translational Medicine-2012), San Antonio, Texas, USA hosted by OMICS Group Conferences, September 17-19, 2012
66.	Jessica Z. Sugianto, Yisheng Fang, Brandon Swartz, **Payal Kapur**. Three different subtypes of renal cell carcinoma in one patient. College of American Pathologists, San Diego, CA. September 9, 2012. Archives of pathology and laboratory Medicine.
67.	Yung Khan Tan, Ephrem O Olweny, Zhou Wei Liu, **Payal Kapur**, Steve Faddegon, Gang Yin, Jeffrey Cadeddu.Vorinostat may have renoprotective effects in ischemia-reperfusion injury. 30th World Congress Of Endourology & SWL. August 27, 2012. Source: Journal of endourology Volume: 26 Supplement: 1 Pages: A3-A4 Published: SEP 2012
68.	Ephrem O Olweny, Vikrant Sharma, **Payal Kapur**, Hanli Liu, Claus G Roehrborn, Jeffrey A Cadeddu. Prostate cancer detection using a combined auto fluorescence decay lifetime and white light reflectance measurement system; evaluation of a novel optical probe. 30th World Congress Of Endourology & SWL. August 27, 2012. Source: Journal of endourology Volume: 26 Supplement: 1 Pages: A247-A247 Published: SEP 2012

69.	James Brugarolas, **Payal Kapur**, Samuel Pena-Llopis, Alana Christie, Xian-Jin Xie. Toward a molecular genetic classification of clear cell renal cell carcinoma. Abstract #107148. American Society of Clinical Oncology, Chicago, IL, June 2012.
70.	Bishoy A. Gayed, Ramy F. Youssef, Aditya Bagrodia, **Payal Kapur**, Arthur I. Sagalowsky, Yair Lotan, Vitaly Margulis. Prognostic role of cell cycle–related biomarkers in clear cell renal cell carcinoma. Abstract #107622. American Society of Clinical Oncology, Chicago, IL, June 2012.
71.	Oussama M. Darwish, Ganesh Raj, Ramy F. Youssef, **Payal Kapur**, Aditya Bagrodia, Michael Belsante, Yair Lotan, Vitaly Margulis.Novel stratification of the recurrence risk following surgical extirpation of clear cell renal cell carcinoma using tissue biomarkers in the mammalian target of rapamycin pathway. Abstract #107593. American Society of Clinical Oncology, Chicago, IL, June 2012.
72.	Bagrodia, Aditya; Youssef, Ramy; Darwish, Oussama; **Payal Kapur**, Arthur I. Sagalowsky, Yair Lotan, Vitaly Margulis. Prospective evaluation of cell cycle biomarkers for prediction of cancer-specific mortality in patients with upper tract urothelial carcinoma. American Urological Association Annual Meeting, Atlanta, GA, May 19-23, 2012.Sponsor(s): AUA Source: Journal of Urology Volume: 187 Issue: 4 Supplement: S Pages: E158-E159 Meeting Abstract: 387 Published: APR 2012
73.	Darwish, Oussama; Youssef, Ramy; **Kapur, Payal**; et al. Number of altered biomarkers in the mammalian target of rapamycin independently correlates with oncologic outcomes in patients with clear cell renal cell carcinoma. American Urological Association Annual Meeting, Atlanta, GA, May 19-23, 2012. Sponsor(s): AUA Source: Journal of Urology Volume: 187 Issue: 4 Supplement: S Pages: E525-E526 Meeting Abstract: 1297 Published: APR 2012
74.	Olweny, Ephrem O.; **Kapur, Payal**; Tan, Yung K.; et al. Irreversible electroporation: non-thermal and thermal capabilities for kidney ablation in a porcine model. American Urological Association Annual Meeting, Atlanta, GA, May 19-23, 2012. Sponsor(s): AUA Source: Journal of Urology Volume: 187 Issue: 4 Supplement: S Pages: E344-E344 Meeting Abstract: 845 Published: APR 2012
75.	Youssef, Ramy; **Kapur, Payal**; Mosbah, Ahmed; et al. Prognostic biomarkers for squamous cell carcinoma of the bladder. American Urological Association Annual Meeting, Atlanta, GA, May 19-23, 2012. Sponsor(s): AUA Source: Journal of Urology Volume: 187 Issue: 4 Supplement: S Pages: E771-E772 Meeting Abstract: 1912 Published: APR 2012
76.	Youssef, Ramy; Darwish, Oussama; Belsante, Michael; et al. Clear cell renal cell carcinoma: alterations in mammalian target of rapamycin pathway constituents correlate with pathological features. American Urological Association Annual Meeting, Atlanta, GA, May 19-23, 2012. Sponsor(s): AUA Source: Journal of Urology Volume: 187 Issue: 4 Supplement: S Pages: E400-E400 Meeting Abstract: 983 Published: APR 2012
77.	V. Sharma, **P. Kapur**, E. Olweny, J. Cadeddu, C. G. Roehrborn, and H. Liu. Auto-fluorescence lifetime spectroscopy for prostate cancer detection: an optical biopsy approach. OSA Optics Photonics Congress, Miami, Florida, April 29-May 3, 2012. Biomedical Optics, OSA Technical Digest (Optical Society of America, 2012), paper JM3A.19. http://www.opticsinfobase.org/abstract.cfm?URI=BIOMED-2012-JM3A.19
78.	Pezhouh MK, Rakheja D, Youssef RF, Lotan Y, Margulis V, **Kapur P** Prognostic Relevance of mTORC1 Pathway Components in Papillary Renal Cell Carcinoma. 101st Annual Meeting of the United States and Canadian Academy of Pathology (USCAP), Vancouver, Canada, March 17-23, 2012. Sponsor(s): US & Canadian Acad Pathol (USCAP) Source: Laboratory investigation. Volume: 92 Supplement: 1 Pages: 219A-219A Meeting Abstract: 914 Published: FEB 2012
79.	Kinard, T. Rakheja D, Youssef RF, Lotan Y, Margulis V, **Kapur P**. Prognostic Relevance of mTORC1 Pathway Components in Chromophobe Renal Cell Carcinoma. 101st Annual Meeting of the United States and Canadian Academy of Pathology (USCAP), Vancouver, Canada, March 17-23, 2012. Sponsor(s): US & Canadian Acad Pathol (USCAP) Source: Laboratory investigation. Volume: 92 Supplement: 1 Pages: 220A-220A Meeting Abstract: 918 Published: FEB 2012
80.	Sugianto, J. Z. Rakheja D, Youssef RF, Lotan Y, Margulis V, **Kapur P**. Comparison of mTORC1 Pathway Immunoexpression between Chromophobe Renal Cell Carcinoma and Renal Oncocytoma.

	101st Annual Meeting of the United States and Canadian Academy of Pathology (USCAP), Vancouver, Canada, March 17-23, 2012. Sponsor(s): US & Canadian Acad Pathol (USCAP) Source: Laboratory investigation Volume: 92 Supplement: 1 Pages: 243A-243A Meeting Abstract: 1019 Published: FEB 2012
81.	Laura-Maria Krabbe, MD; Mary E. Westerman, BA; Aditya Bagrodia, MD; Bishoy A. Gayed, MD; Oussama M. Darwish, MD; Ahmed Q. Haddad, MD; Dina Khalil, MD; **Payal Kapur, MD**; Arthur I. Sagalowsky, MD; Yair Lotan, MD; and Vitaly Margulis, Dysregulation of the beta−catenin complex is an independent predictor of oncological outcomes in patients with CCRCC. MD. 14th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 4-6, 2013. (Oral Abstract)
82.	Aditya Bagrodia; Laura-Maria Krabbe; Bishoy Gayed; **Payal Kapur**; Ira Bernstein; Xian-Jin Xie; Christopher Wood; Jose Karam; Eiji Kikuchi; Alon Weizer; Jay Raman; Mesut Remzi; Charles Guo; Nathalie Rioux-Leclerq; Andrea Haitel; Marco Roscigno; Francesco Montorsi; Christian Bolenz; Karim Bensalah; Arthur Sagalowsky; Shahrokh Shariat; Yair Lotan; and Vitaly Margulis. Evaluation of the prognostic significance of altered mammalian target of rapamycin (MTOR) pathway biomarkers in upper tract urothelial carcinoma (UTUC). 14th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 4-6, 2013. (Poster)
83.	Oussama M. Darwish; Laura-Maria Krabbe; Paul H. Chung; Mary E. Westerman; Aditya Bagrodia; Bishoy A. Gayed; Ahmed Q. Haddad; Ramy F. Youssef; **Payal Kapur**; Arthur I. Sagalowsky; Yair Lotan; and Vitaly Margulis.The degree of preoperative hydronephrosis predicts adverse pathologic features and worse oncological outcomes in high-grade upper tract urothelial carcinoma. 14th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 4-6, 2013. (Poster)
84.	Laura-Maria Krabbe; Mary E Westerman; Aditya Bagrodia; Bishoy A. Gayed; Dina Khalil; **Payal Kapur**; Shahrokh F. Shariat; Ganesh V. Raj; Arthur I. Sagalowsky; Jeffrey A. Cadeddu; Yair Lotan; and Vitaly MargulisSurgical excision of intramural ureter and a bladder cuff during nephroureterectomy is an independent predictor of oncological outcomes in patients with upper tract urothelial carcinoma. 14th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 4-6, 2013. (Poster)
85.	Jeffrey Gahan, Jodi Antonelli, Bedir Selahattin, Yunbo Ma, Steve Faddegon, **Payal Kapur**, Jeffrey Cadeddu. Can remote ischemic preconditioning confer protection against reperfusion injury following warm ischemia in a porcine solitary-kidney model? 31st World Congress of Endourology & SWL, New Orleans, LA, October 22-25, 2013
86.	Laura-Maria Krabbe, Oussama M Darwish, Ganesh Raj, Ramy F. Youssef, **Payal Kapur**, Aditya Bagrodia, Michael Belsante, Yair Lotan, Vitaly Margulis.Novel stratification of the recurrence risk following surgical extirpation of clear cell renal cell carcinoma using tissue biomarkers in the mammalian target of rapamycin pathway. 2013 American Society of Clinical Oncology (ASCO) Annual Meeting, Chicago, IL, May 31-June 4, 2013. Abstract Control Number: 116694 Permanent Abstract ID: 4581. ASCO Chicago, IL, June 2013
87.	**Payal Kapur**, Alana Christie, Samuel Peña-Llopis, Vitaly Margulis, Yair Lotan, Xian-Jin Xie, and James Brugarolas. BAP1 Loss Defines a Pathologically Aggressive Subgroup of Clear Cell Renal Cell Carcinoma. Abstract #1740. United States & Canadian Academy of Pathology's 102nd Annual Meeting, Baltimore, MD, March 2-8, 2013.
88.	**Payal Kapur**, Alana Christie, Samuel Peña-Llopis, Vitaly Margulis, Yair Lotan, Xian-Jin Xie, and James Brugarolas. BAP1 Loss Results in mTORC1 Activation in Clear Cell Renal Cell Carcinoma. Abstract #1715. United States & Canadian Academy of Pathology's 102nd Annual Meeting, Baltimore, MD, March 2-8, 2013.
89.	**Payal Kapur,** Alana Christie, Samuel Peña-Llopis, Vitaly Margulis, Yair Lotan, Xian-Jin Xie, and James Brugarolas. BAP1 Loss Results in Cell Cycle Dysregulation and Increased Proliferation in Clear Cell Renal Cell Carcinoma. Abstract #1703. United States & Canadian Academy of Pathology's 102nd Annual Meeting, Baltimore, MD, March 2-8, 2013.
90.	Ellis CL, Chang AG, Cimino-Mathews A, Argani P, Yaacoub R, **Kapur P**, Montgomery EA, Epstein JI. GATA3 is a Useful Marker for Signet Ring Adenocarcinoma of the Urinary Bladder. Abstract

	#1703. United States & Canadian Academy of Pathology's 102nd Annual Meeting, Baltimore, MD, March 2-8, 2013.
91.	James Brugarolas, **Payal Kapur**, Samuel Pena-Llopis, Alana Christie, Xian-Jin Xie. Toward a molecular genetic classification of clear cell renal cell carcinoma. 2013 Genitourinary Cancers Symposium, Orlando, FL, February 14-16, 2013.
92.	Oussama M. Darwish, Ganesh Raj, Ramy F. Youssef, **Payal Kapur**, Aditya Bagrodia, Michael Belsante, Yair Lotan, Vitaly Margulis. Novel stratification of the recurrence risk following surgical extirpation of clear cell renal cell carcinoma using tissue biomarkers in the mammalian target of rapamycin pathway. 2013 Genitourinary Cancers Symposium, Orlando, FL, February 14-16, 2013.
93.	Bishoy A. Gayed, Ramy F. Youssef, Aditya Bagrodia, **Payal Kapur**, Arthur I. Sagalowsky, Yair Lotan, Vitaly Margulis. Prognostic role of cell cycle–related biomarkers in clear cell renal cell carcinoma. 2013 Genitourinary Cancers Symposium, Orlando, FL, February 14-16, 2013.
94.	S. Huerta, X. Gao, S.P. Dineen, **P. Kapur**, D. Saha, J. Meyer. Role of P53, Bax, P21, And DNA PKcs In Radiation Sensitivity Of HCT-116 Cells. Quick Shot Presentation at the 8th Annual Academic Surgical Congress, New Orleans, LA, February 5-7, 2013
95.	Corbin Jacobs; Vasu Tumati; David Hong; **Payal Kapur, MD**; David Pistenmaa, MD; Xian-Jin Xie, PhD; Jer-Tsong Hsieh, PhD; Debabrata Saha, PhD; D. Nathan Kim, MD, PhD.High-Risk Prostate Cancer Patients Treated with Radiation Therapy UT Southwestern 51st Medical Student Research Forum, January 2013.
96.	Laura-Maria Krabbe, MD, Aditya Bagrodia, MD, Ahmed Haddad, MD, PhD, Bishoy Gayed, MD, **Payal Kapur, MD**, Dina Khalil, MD, Linda Hynan, PhD, Christopher Wood, MD, Jose Karam, MD, Alon Weizer, MD, Jay Raman, MD, Mesut Remzi, MD, Nathalie Rioux-Leclercq, MD, Andrea Haitel, MD, Marco Roscigno, MD, Christian Bolenz, MD, Karim Bensalah, MD, Arthur Sagalowsky, MD, Sharokh Shariat, MD, Yair Lotan, MD and Vitaly MargulisMulti-institutional validation of the predictive value of ki−67 in patients with high-grade urothelial carcinoma of the upper urinary tract., MD. 15th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 3-5, 2014. (Poster)
97.	Ramy Youssef, **Payal Kapur, MD**, Dina Wahib, MD, Ahmed Mosbah, MD, Hassan Abol-Enein, MD, Mohamed Ghoniem, MD and Yair Lotan, MD. Clinico-biological prognostic score for prediction of oncological outcomes after radical cystectomy for squamous cell carcinoma of the bladder. 15th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 3-5, 2014. (Poster)
98.	Ramy Youssef, **Payal Kapur, MD**, Ahmed Mosbah, MD, Hassan Abol-Enein, MD, Mohamed Ghoniem, MD and Yair Lotan, MD. Prognostic biomarkers for bilharzial and non-bilhrazial related bladder cancer: immunohistochemistry study of 14 markers. 15th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 3-5, 2014. (Poster)
99.	Ahmed Haddad, **Payal Kapur, MD**, Nirmish Singla, MD, Jay Raman, MD, Matthew Then, MD, Philipp Nuhn, MD, Alexander Buchner, MD, Patrick Bastian, MD, Christian Seitz, MD, Shahrokh Shariat, MD, Karim Bensalah, MD, Nathalie Rioux-Leclercq, MD, Arthur Sagalowsky, MD, Yair Lotan, MD and Vitaly Margulis, MD. Validation of mammalian target of rapamycin biomarker panel in patients with clear cell renal cell carcinoma. 15th Annual Meeting of the Society of Urologic Oncology, Bethesda, MD, December 3-5, 2014. (Poster)
100.	Thai Huu Ho, **Payal Kapur**, Richard Wayne Joseph, Daniel Serie, Jeanette Eckel-Passow, Mansi Parasramka, John C. Cheville, James Brugarolas, Alexander S. Parker.Loss of BAP1 and PBRM1 expression in non-clear cell renal cell carcinomas compared to clear cell renal cell carcinomas. American Society of Clinical Oncology (ASCO) 50th Annual Meeting, Chicago, IL, May 30-June 3, 2014
101.	Richard Wayne Joseph, **Payal Kapur**, Daniel Serie, John C. Cheville, Jeanette Eckel-Passow, Mansi Parasramka, Thai Huu Ho, Eugene D. Kwon, Robert Houston Thompson, James Brugarolas, Alexander S. Parker Association of loss of BAP1 expression in cell renal cell carcinomas with PDL1 expression. American Society of Clinical Oncology (ASCO) 50th Annual Meeting, Chicago, IL, May 30-June 3, 2014

102.	Laura-Maria Krabbe, Mary Elizabeth Westerman, Aditya Bagrodia, Bishoy A. Gayed, Oussama M. Darwish, Ahmed Q Haddad, Dina Khalil, **Payal Kapur**, Arthur I. Sagalowsky, Yair Lotan, Vitaly Margulis. Dysregulation of the beta-catenin complex as an independent predictor of oncological outcomes in patients with ccRCC. 2014 Genitourinary Cancers Symposium, San Francisco, CA, January 30- February 1, 2014.
103.	Ramy Youssef, Durham, NC, Bishoy Gayed*, Oussama Darwish, **Payal Kapur**, Ganesh Raj, Michael DiMaio, Arthur Sagalowsky, Vitaly Margulis.Multi-disciplinary Management of Renal Cell Carcinoma with Venous Tumor Thrombus: Are we getting better? 2014 American Urological Association Annual Meeting, Orlando, FL, May 16–21, 2014.
104.	Aditya Bagrodia*, Laura Krabbe, Bishoy Gayed, **Payal Kapur**, Oussama Darwish, Ira Bernstein, Xian-Jin Xie, Christopher Wood, Richard Zigeuner, Alon Weizer, Jay Raman, Mesut Remzi, Cord Langner, Marco Roscigno, Francesco Montorsi, Christian Bolenz, Karim Bensalah, Jose Karam, Arthur Sagalowsky, Shahrokh Shariat, Yair Lotan, Vitaly Margulis. Multi-institutional evaluation of the prognostic significance of altered mammalian target of rapamycin (MTOR) pathway biomarkers in upper tract urothelial carcinoma (UTUC). 2014 American Urological Association Annual Meeting, Orlando, FL, May 16–21, 2014.
105.	Bishoy Gayed*, Aditya Bagrodia, Mansi Gaitonde, Laura-Maria Krabbe, Matthew Meissner, **Payal Kapur**, Ramy Youssef, Arthur Sagalowsky, Yair Lotan, Vitaly Margulis. Feasibility of obtaining biomarker profiles from endoscopic biopsy specimens in upper tract urothelial carcinoma: preliminary results. 2014 American Urological Association Annual Meeting, Orlando, FL, May 16–21, 2014.
106.	Paul Chung*, Laura-Maria Krabbe, Oussama Darwish, Mary Westerman, Aditya Bagrodia, Bishoy Gayed, Ahmed Haddad, **Payal Kapur**, Arthur Sagalowsky, Yair Lotan, Vitaly Margulis. Degree of hydronephrosis predicts adverse pathological features and worse oncologic outcomes in high-grade upper tract urothelial carcinoma. 2014 American Urological Association Annual Meeting, Orlando, FL, May 16–21, 2014.
107.	Laura-Maria Krabbe*, Yair Lotan, Aditya Bagrodia, Bishoy A. Gayed, Oussama M. Darwish, Ramy F. Youssef, Dallas, TX, Christian Bolenz, Arthur I. Sagalowsky, Ganesh V. Raj, Shahrokh F. Shariat, **Payal Kapur**, Vitaly Margulis.Is there evidence of discordant biology in urothelial cancer of the lower and upper urinary tract? Prospective comparison of molecular signatures. 2014 American Urological Association Annual Meeting, Orlando, FL, May 16–21, 2014.
108.	L Bu, E Lucas, A Christie, D Khalil, Y Lotan, C Roehrborn, **P Kapur**. Pathological Predictors of Biochemical Recurrence in Patients with a Positive Surgical Margin at Radical Prostatectomy. United States & Canadian Academy of Pathology's 103rd Annual Meeting, San Diego, CA, March 1-7, 2014.
109.	Oussama M. Darwish, Laura-Maria Krabbe, Paul H. Chung, Mary Elizabeth Westerman, Aditya Bagrodia, Bishoy A. Gayed, Ahmed Q Haddad, **Payal Kapur**, Arthur I. Sagalowsky, Yair Lotan, Vitaly Margulis The degree of preoperative hydronephrosis to predict pathologic features and oncologic outcomes in high-grade upper tract urothelial carcinoma. 2014 Genitourinary Cancers Symposium, San Francisco, CA, January 30- February 1, 2014.
110.	Richard Wayne Joseph, Payal Kapur, Daniel Serie, Jeanette Eckel-Passow, Thai Huu Ho, James Brugarolas, Alexander S. Parker Loss of BAP1 and PBRM1 protein expression and its association with clear cell renal cell carcinoma-specific survival. 2014 Genitourinary Cancers Symposium, San Francisco, CA, January 30- February 1, 2014.
111.	Aditya Bagrodia, Laura-Maria Krabbe, Bishoy A. Gayed, **Payal Kapur**, Oussama M. Darwish, Ira Bernstein, Xian-Jin Xie, Christopher G. Wood, Richard Zigeuner, Alon Z. Weizer, Jay D. Raman, Mesut Remzi, Cord Langner, Marco Roscigno, Christian Bolenz, Karim Bensalah, Arthur I. Sagalowsky, Shahrokh F. Shariat, Yair Lotan, Vitaly Margulis.Multi-institutional evaluation of the prognostic significance of altered mammalian target of rapamycin (mTOR) pathway biomarkers in upper-tract urothelial carcinoma (UTUC). 2014 Genitourinary Cancers Symposium, San Francisco, CA, January 30- February 1, 2014.
112.	Niccolo Maria Passoni, MD; Bishoy Gayed, MD; **Payal Kapur, MD**; Arthur Sagalowsky, MD; Shahrokh Shariat, MD; Yair Lotan, MD.Assessment of cell-cycle markers in improving discrimination of eortc and cueto risk models in predicting recurrence and progression of non-muscle invasive high-

	risk bladder cancer. 16th Annual Meeting of the Society of Urologic Oncology, Washington, DC, December 2-4, 2015. (Poster)
113.	AH Lay, MS Morgan, N Canvasser, X Wang, **P Kapur**, H Liu, CG Roehrborn, JA Cadeddu.Detecting Positive Surgical Margins: Utilization of Light Reflectance Spectroscopy on ex vivo Prostate Specimens. 33rd World Congress of Endourology & SWL, October 1-4, 2015. (Poster)
114.	Abhisek Swaika, Thai Huu Ho, **Payal Kapur**, Daniel Serie, Jeanette Eckel-Passow, James Brugarolas, Alexander S. Parker, Richard Wayne Joseph. Clinical impact of loss of H3K36me3 expression in patients with clear cell renal cell carcinoma. American Society of Clinical Oncology (ASCO) 51st Annual Meeting, Chicago, IL, May 29-June 2, 2015.
115.	Laura-Maria Krabbe, Aditya Bagrodia, Ahmed Haddad, **Payal Kapur**, Dina Khalil, Linda S. Hynan, Christopher G. Wood, Jose A. Karam, Alon Z. Weizer, Jay D. Raman, Mesut Remzi, Nathalie Rioux-Leclercq, Andrea Haitel, Marco Roscigno, Christian Bolenz, Karim Bensalah, Arthur I. Sagalowsky, Shahrokh F. Shariat, Yair Lotan, Vitaly Margulis.Multi-institutional validation of the predictive value of Ki-67 in patients with high-grade urothelial carcinoma of the upper urinary tract. American Society of Clinical Oncology (ASCO) 51st Annual Meeting, Chicago, IL, May 29-June 2, 2015.
116.	C Caruso, L-M Krabbe, **P Kapur**, L Hynan, JA Karam, AZ Weizer, M Remzi, N Rioux-Leclerq, A Haitel, A Sagalowsky, SF Shariat, Y Lotan, RD Bruggeman, CS Abendroth, Z YangDJ DeGraff, JD Raman. International, Multicenter Study of FOXA1 Expression in Urothelial Carcinoma of the Upper Urinary Tract (834). United States & Canadian Academy of Pathology's 104th Annual Meeting, Boston, MA, March 21-27, 2015.
117.	P Friedman, M Sayah, A Egharevba, K Molberg, J Cadeddu, D Rakheja, **P Kapur**. Evaluation of the Concordance of Histologic Subtype and Prognostic Indicators Between Renal Cell Carcinoma Biopsies and Their Subsequent Resections (881). United States & Canadian Academy of Pathology's 104th Annual Meeting, Boston, MA, March 21-27, 2015.
118.	Amanda Shreders, Richard Wayne Joseph, Daniel Serie, **Payal Kapur**, Thai Huu Ho, Jeanette Eckel-Passow, James Brugarolas, Alexander S. Parker. High concordance of BAP1 and PBRM1 expression in patient-matched primary and metastatic ccRCC tumors. 2015 Genitourinary Cancers Symposium, Orlando, FL, February 26-28, 2015.
119.	Ralf Kittler, PhD; Christine Shiang; Ryan Hutchinson, MD; **Payal Kapur, MD** and Yair Lotan, MD. Whole exome assessment of grade progression in low-grade non-invasive bladder tumors. 17th Annual Meeting of the Society of Urologic Oncology, San Antonio, TX, November 30-December 2, 2016. (Poster)
120.	Corbin Jacobs, Vasu Tumati, **Payal Kapur**, Raquibul Hannan, Jer-Tsong Hsieh, Dong W. Kim, Debabrata Saha.Association of decreased tumor DAB2IP and high-risk prostate cancer-specific survival. American Society of Clinical Oncology (ASCO) 52nd Annual Meeting, Chicago, IL, June 3-7, 2016.
121.	Yin Xi, Qing Yuan, Yue Zhang, Ananth Madhuranthakam, Jeffrey Cadeddu, Vitaly Margulis, James Brugarolas, **Payal Kapur**, and Ivan Pedrosa.Statistical Clustering of Parametric Maps from Quantitative Dynamic Contrast Enhanced MRI and an Associated Decision Tree Model for Non-Invasive Tumor Grading of Solid Clear Cell Renal Cell Carcinoma. International Society for Magnetic Resonance in Medicine 24th Annual Meeting, Singapore, May 7-8, 2016.
122.	Yue Zhang, **Payal Kapur**, Jin Ye, Qing Yuan, Ananth Madhuranthakam, Ivan Dimitrov, Yin Xi1, Takeshi Yokoo, Jeffrey Cadeddu, Vitaly Margulis, Andrea Pavía-Jiménez, James Brugarolas, Robert E. Lenkinski1, and Ivan Pedrosa. Exploring Intratumoral Heterogeneity of Lipid Metabolism in Clear Cell Renal Cell Carcinoma with Dixon-based MRI. International Society for Magnetic Resonance in Medicine 24th Annual Meeting, Singapore, May 7-8, 2016.
123.	Ahmed Haddad*, Jun-Hang Luo, Laura-Maria Krabbe, Oussama Darwish, Bishoy Gayed, Ramy Youssef, **Payal Kapur**, Dinesh Rakheja, Yair Lotan, Arthur Sagalowsky, Vitaly Margulis. Prognostic value of tissue based biomarker signature in clear cell renal cell carcinoma. American Urological Association's 2016 Annual Meeting, San Diego, CA, May 6-10, 2016.
124.	Lauren Shuman*, Joshua Warrick, David DeGraff, Shahrokh Shariat, Jose Karam, Christopher Wood, Alon Weizer, Mesut Remzi, Andrea Haitel, Karim Bensalah, Nathalie Rioux-Ceclerq, Christian

	Bolenz, Marco Roscigno, Laura-Maria Krabbe, **Payal Kapur**, Yair Lotan, Vitaly Margulis, Jay Raman.Loss of FOXA1 Expression is Associated with Adverse Pathologic Features and Inferior Oncologic Outcomes Following Radical Nephroureterectomy. American Urological Association's 2016 Annual Meeting, San Diego, CA, May 6-10, 2016.
125.	Paul Friedman, Alana Christie, Xian-Jin Xie, Dinesh Rakheja, James Brugarolas, **Payal Kapur**.EZH2 as a novel target for aggressive clear cell renal cell carcinoma (914). United States & Canadian Academy of Pathology's 105th Annual Meeting, Boston, MA, March 12-18, 2016.
126.	Paul Friedman, Farrah Homayoun, Vitaly Margulis, Jeffrey Cadeddu, Dinesh Rakheja, James Brugarolas, **Payal Kapur**. Immunohistochemical comparison of BAP1 immunoexpression status between needle biopsies and nephrectomies in clear cell renal cell carcinoma (913). United States & Canadian Academy of Pathology's 105th Annual Meeting, Boston, MA, March 12-18, 2016.
127.	Andre Poisl Fay, Guillermo de Velasco, Kathryn P. Gray, Thai Huu Ho, Jiaxi Song, **Payal Kapur**, Laurence Albiges, David F. McDermott, Daniel Yick Chin Heng, James Brugarolas, Toni K. Choueiri, Sabina Signoretti.The impact of PBRM1 and BAP1 expression on outcomes of patients with metastatic renal cell carcinoma (mRCC) treated with VEGF-targeted therapy (TT). 2016 Genitourinary Cancers Symposium, San Francisco, CA, January 7-9, 2016.
128.	Friedman, P. **Kapur, P**. Foamy Gland High-Grade Prostatic Intraepithelial Neoplasia on Core Biopsy and Subsequent Radical Prostatectomy: A Case Report of a Rare Variant. Texas Society of Pathologists (TSP). Dallas, TX, January 2016.
129.	Morphologic Heterogeneity Correlates with Clinical Phenotypes in Clear Cell Renal Cell Carcinoma Qi Cai[1], Alana Christie[2], Min Kim[3], Qinbo Zhou[2], Ellen Araj[2], Dinesh Rakheja[2], Renee McKay[2], James Brugarolas[4], Payal Kapur[4] USCAP 2019
130.	Effects of Immune Checkpoint inhibitors on Morphology of renal cell carcinoma. Sasan Setoodeh, *Christopher Przybycin[2], Roy Elias[3], Brian Rini [4], James Brugarolas[3], Payal Kapur* . Kidney Cancer Association. Nov 2019, Miami (platform)
131.	Intratumor heterogeneity of anaplastic chRRC and an unexpected response to Everolimus William Schwartzman1, Roy Elias1,2, Viral Patel1, Layton Woolford2, Suneetha Chintalapati3, Payal Kapur3, Dwight Oliver3, James Brugarolas1,2
132.	Acute interstitial nephritis (AIN) following immune checkpoint inhibitor (ICI) therapy in metastatic RCC (mRCC) as a potential predictor of response Viral M. Patel1, Roy Elias1, Joseph Formella2, William Schwartzman1, Alana Christie3, Qi Cai3, Payal Kapur3, Ivan Pedrosa3, Hans Hammers1,3, James Brugarolas1,3
133.	Safety and efficacy of immune checkpoint inhibitors (ICI) in metastatic non-clear cell renal cell carcinoma (nccRCC): An institutional experience. William Schwartzman, Roy Elias, Viral M. Patel, Alex Isaac Bowman, Suneetha Chintalapati, Payal Kapur, Hans J. Hammers, James Brugarolas; UT Southwestern Medical Center, Dallas, TX; University of Texas Southwestern Medical Center, Dallas, TX; The University of Texas Southwestern, Dallas, TX; The University of Texas Southwestern Medical Center, Dallas, TX. GU ASCO 2020 Abstract
134.	A real-world experience of immune checkpoint inhibitors (ICI) in metastatic renal cell carcinoma (mRCC). Roy Elias, Nicholas Levonyak, Alana Christie, Isaac Alexander Bowman, Payal Kapur, Raquibul Hannan, Hans J. Hammers, James Brugarolas; University of Texas Southwestern Medical Center, Dallas, TX; UT Southwestern Medical Center, Dallas, TX; The University of Texas Southwestern, Dallas, TX; The University of Texas Southwestern Medical Center, Dallas, TX
135.	Choueiri TK, Albiges L, Atkins MB, Bakouny Z, Bratslavsky G, Braun DA, Haas NB, Haanen JBAG, Hakimi AA, Jewett MAS, Jonasch E, Kaelin WG Jr, **Kapur P**, Labaki C, Lewis B, McDermott DF, Pal SK, Pels K, Poteat S, Powles T, Rathmell WK, Rini BI, Signoretti S, Tannir NM, Uzzo RG, Hammers HJ. From Basic Science to Clinical Translation in Kidney Cancer: A Report from the

	Second Kidney Cancer Research Summit. **Clin Cancer Res**. 2021 Dec 29. doi: 10.1158/1078-0432.CCR-21-3238. Epub ahead of print. PMID: 34965942.

Grant Support

Completed Research Support

W81XWH-09-1-0406 (PI: Cadeddu) U.S. DOD (UT Arlington) Title: Development of hybrid optical biopsy probe to improve prostate cancer diagnosis Goal: To initiate research idea development through three local state institutions (UT Arlington, UT Southwestern, and University of North Texas Health Science Center) in order to develop a hybrid, multi-modal spectroscopic imaging system to greatly improve sensitivity and accuracy for image-guided needle biopsy in prostate cancer detection and diagnosis. Aim 1: To develop a dual-modal optical spectroscopic method, based on light scattering spectroscopy and time-resolved fluorescence spectroscopy of tissue. Aim 2: To further integrate the optical fibers, which collect both light scattering and fluorescence signals from the prostate tissue, with a transrectal-ultrasound, needle-biopsy probe. Aim 3: To collect optical signals of control and cancer tissues in vivo along with the regular human needle biopsy, followed by classification algorithm development to discriminate cancer tissues. Aim 4: verify the accuracy and sensitivity of the integrated probe in order to provide real-time, on-site, improved guidance for prostate cancer tissue biopsy. Role: Co-Investigator	06/01/11-05/31/12 $20,000	0.72 CM (8%)
P30 CA142543 (PI: Willson) NIH/NCI Title: Cancer Center Support Grant Goal: This project supports the Harold C. Simmons Cancer Center at the University of Texas Southwestern Medical Center. The Simmons Cancer Center integrates cancer research, clinical cancer care, and cancer control outreach across the University of Texas Southwestern Medical Center and its affiliated hospital systems. The overriding mission of the center is to leverage these affiliations and the exceptional resources available to improve cancer outcomes in the Dallas-Fort Worth (DFW) region and the nation. Dr. Kapur was Co-Director of the Tissue Management Resource. The project continues, but Dr. Kapur's participation ended in 2013.	08/03/11-07/31/13 $896,227	1.8 CM (15%)
R01 CA138662 (PI: Cadeddu) NIH/NCI (UT Arlington) Title: Transrectal Imaging of Prostate Cancer Using a Globally Convergent Method Goal: To develop a novel globally convergent method in combination with a transrectal, multi-channel optical imaging system that can be used in vivo for transrectal detection and diagnosis of prostate cancer in humans, to distinguish prostate cancer from benign prostatic parenchyma. Aim 1: To develop and validate a globally convergent method (GCM) to obtain 2-dimentional (2- D) reconstructed images of optical parameters (both absorption and scattering parameters) that are characteristic of human prostate cancer. Aim 2: Todesign, implement, and validate a transrectal, multi-channel optical imaging system that can be used to measure optical signals from human prostate glands for non-invasive or minimally invasive prostate cancer diagnosis or/and screen. Aim 3(a): To experimentally validate the developed 2-D GCM using human prostate-like tissue phantoms so that appropriate refinement, modification, or calibration can be explored to improve both theoretical accuracy and experimental designs.	05/01/10-04/30/15 $51,303	1.2 CM (10%)

Aim 3(b): To perform optical imaging measurements on ex vivo human prostate glands, which are removed from patients during prostatectomy, and compare with histology results to validate the newly developed 2-D GCM.
Aim 3(c): To validate the 2-D GCM and transrectal imaging system by performing in vivo human prostate measurements during prostatectomy.
Role: Co-Investigator

OTD-104476-02 (PI: Raj) 03/20/13-08/31/15 1.8 CM (15%)
Janssen Research & Development LLC $452,666
Title: Targeted Disruption of androgen receptor & cofactors
Goal: To further develop the T6 peptidomimetic as a novel AR inhibitor.
Aim 1: To identify binding partners of the wxxlf motif.
Aim 2: To evaluate t6 peptidomimetics and derivatives thereof for clinical trials
Role: Co-Investigator

5 R01 CA159144-05 (PI: Hsieh) 09/21/11-07/31/16 0.36CM (3%)
NIH/NCI $220,673
Title: Targeting aggressive prostate cancer with novel theranostic nanomedicine
Goal: To generate new molecular medicine with specific mechanism of action using a novel drug delivery platform with cancer specific targeting. The outcome will provide new therapeutic regimen for prostate cancer therapy.
Aim 1: Construct dendrimer nanoconjuate containing specific CPP, peptide therapeutic(s) and bifunctional chelator for PET tracer.
Aim 2: Select the most potent compound with screening systems based on specific mechanism(s) of action.
Aim 3: Determine the bio-distribution, pharmacokinetics, imaging quality and potential cytotoxicity in vivo.
Aim 4: Evaluate the therapeutic efficacy using various pre-clinical models.
Role: Co-Investigator

W81XWH-12-1-0288-03 (PI: Raj) 09/30/12-09/29/16 0.36 CM (3%)
U.S. Department of Defense $75,000
Title: Targeting ligand-dependent and ligand-independent androgen receptor signaling in prostate cancer
Goal: To explore a new molecular medicine for metastatic prostate cancer. Nanoparticle will be designed as a drug delivery vehicle by combining with Small peptide or peptidomimetics targeting key molecular defects in this disease.
Aim 1: To improve the design and synthesis of peptidomimetics for the LxxLL and WxxLF motif by using oligo-benzamide scaffolds that are highly specific for and can disrupt the AR-PELP-1 interaction.
Aim 2: To mechanistically characterize the ability of the peptidomimetics to modulate AR signaling in PCa cells.
Aim 3: To study the effect of peptidomimetics on AR signaling in PCa cells in vivo.
Role: Co-Investigator

RP130603-03 (PI: Brugarolas) 06/01/13-11/30/16 1.8CM (15%)
Cancer Prevention & Research Institute of Texas $381,730
Title: Evaluation of the role of the BAP1 tumor suppressor gene in renal cancer
Goal: To harness a state of the art tumorgraft model for the evaluation the role of newly discovered mutations in renal cancer and the development of pharmacodynamic markers.
Aim 1: To determine, biochemically, how BAP1 protects kidney cells from tumor development.
Aim 2: To obtain insight into how mutations in BAP1 contribute to the process of kidney cancer development.
Aim 3: To create a model of kidney cancer in mice.
Role: Co-PI

OTD-1009260 (PI: Kapur) 04/05/16-04/05/17 0.36 CM (3%)
Genentech Inc. $107,381
Title: PD-L1 in Clear Cell Renal Cell Carcinoma
Goal: To evaluate the prevalence and role of PD-L1 and CD8 expression in High Risk Adjuvant ccRCC

Aim: 1. Evaluate PD-L1 and CD8 expression in ccRCC 2. Correlate expression with patient demographics, disease type and stage, pathology reports, clinical outcome
Role: PI

W81XWH-12-1-0337-03 (PI: Hsieh) 09/01/12-08/31/17 0.36 CM (3%)
U.S. Department of Defense $90,200
Title: Molecular innovations towards theranostics of aggressive prostate cancer
Goal: A DAB2IP-based theranostic agent can be realized to prevent the early onset of prostate cancer metastasis or delay the progression of metastasis. The objective of this application is to generate a new class of dendrimer-based theranostic agents for aggressive prostate cancer.
Aim 1: To construct dendrimer conjugates containing specific cell permeation peptides, peptide therapeutic(s) and a bifunctional chelator for PET imaging.
Aim 2: To select potent compounds with screening systems based on specific mechanism(s) of action.
Aim 3: To determine the biodistribution, pharmacokinetics, and potential cytotoxicity in vivo.
Aim 4: To evaluate the therapeutic efficacy using various pre-clinical models.
Role: Co-Investigator

W81XWH-13-2-0093-03 (PI: Raj) 09/30/13-09/26/17 1.2 Cal. Months
University of Washington/DOD Subcontract $78,584
Title: Targeting the aberrant androgen receptor in advanced treatment resistant prostate cancer
Contact: Joseph S. Little, USA MED Research and Materiel COM, Fort Detrick, MD 21702
Goal: To develop novel therapies targeted against the full length and splice variant forms of the androgen receptor in enzalutamide-resistant prostate cancer.
Aim 1: Evaluate the ARsvs and ARsv-driven transcriptome in various disease states of PCa and its association with disease progression through each state.
Aim 2: Determine whether interference with ARsv activity using novel AR-targeted agents suppresses generation of an ARsv-induced lethal phenotype and inhibits CRPC growth in a pre-clinical setting.
Aim 3: Instigate clinical trials to assess whether these novel ARtargeting agents (T6 and resorcinol-HSP90i) can reverse resistance to next-generation endocrine therapeutics (abiraterone and MDV3100).
Aim 4: Determine the effectors and regulators of aberrant AR splice variant signaling in CRPC as novel biomarkers and therapeutic targets.

5 R01 CA154475-05 (PI: Pedrosa) 09/15/11-08/31/2018 0.84 Cal. Months
NIH/NCI $204,179
Title: Non-Invasive physiologic predictors of aggressiveness in renal cell carcinoma
Contact: Sharon Richards, Grants Management Specialist, 240-276-6415, Sharon.richards@nih.gov
Goal: To identify vascular and diffusion MRI measures in RCC in vivo that correlate to spatially co-registered molecular alterations promoting angiogenesis and hypoxia and predict aggressive behavior.
Aim 1: To correlate MRI measurements of perfusion and diffusion in primary RCC in vivo with the results of pathologic and molecular assessments in the same tumor after nephrectomy.
Aim 2: To compare the intra-tumoral heterogeneity of perfusion and diffusion on ASL and DWI MRI, respectively, with the tumor heterogeneity at pathology and geographic distribution of tumor necrosis.
Aim 3: To correlate MRI phenotypes based on ASL and DWI tumor characteristics with long-term clinical outcomes in the same patient population.
Aim 4: To compare the intra-tumoral heterogeneity of perfusion on ASL MRI with the heterogeneity in gene expression within the same tumor.

Pilot Grant (PI: Kapur and Rajaram) 10/1/18-12/1/19
256,250
Lyda Hill Foundation, Simmon Cancer Center
Title: Tissue Morphology as a Readout of Tumor Evolution

Goal 1: the generation of a unique data set with genetic (DNA) and phenotypic (RNA/H&E) profiling of multiple tissue regions *within* individual patients
Goal 2: the development of novel machine learning approaches to quantify tissue morphology and to identify components predictive of genomics and evolution.

RP160440 (PI: Brugarolas) 03/01/16-02/28/19 2.16 Cal. Months
Cancer Prevention & Research Institute of Texas $284,816
Title: Targeting the undruggable: a first-in-class inhibitor of the HIF-2 transcription factor
Contact: Lisa Nelson, CPRIT Operations Manager, 512-463-3190, cprit@cprit.state.tx.us
Goal: To identify prognostic and predictive biomarkers of renal cell carcinoma, expand the repertoire of renal cell carcinoma patients that may benefit from HIF2-I, and pave the way for second generation inhibitors.
Aim 1: To evaluate the significance of the functional and molecular ccRCC subtypes previously identified in our lab.
Aim 2: To expand the repertoire of sensitive tumors by exploring rational combination therapies.
Aim 3: To characterize a mechanism of resistance we have identified and explore the possibility that resistance mutations may affect tumor fitness.

RP160340 (PI: Carroll) 03/01/16-08/28/2020 0 Cal. Months
Cancer Prevention & Research Institute of Texas $284,767
Title: The role of the Lats kinases in sarcomatoid renal cell carcinoma
Contact: Lisa Nelson, CPRIT Operations Manager, 512-463-3190, cprit@cprit.state.tx.us
Goal: To provide valuable insight into the molecular nature of sarcomatoid renal cell carcinomas (sRCCs) and also provide us with potential therapeutic targets to pursue in treating sRCC.
Aim 1: To determine cell type of origin of RCC/sRCC in Lats1/2 mutants.
Aim 2: To identify factors mis-regulated in Lats mutants.

PC150151 (PI: Liu) 09/01/2016-08/31/2020 (NCE) 0 Cal. Months
ARMY/DOD $125,021
Title: Epigenetic machinery regulates alternative splicing of androgen receptor (AR) gene in castration-resistant prostate cancer (CRPC)
Contact: Winter, Thomas (US Army MEDCOM USAMRAA (US), 820 Chandler Street, Fort Detrick, MD 21702-5014) thomas.s.winter2.civ@mail.mil
Goals: Overall goal is to explore combination KDM4B inhibitor with AR inhibitor to synergize the therapeutic effect of CRPC.
Aim 1: To establish that KDM4B promotes AR-V7 expression and identify the regulatory mechanisms.
Aim 2: To evaluate the clinical application of KDM4B inhibitors on CRPC tumors-expressing AR-V7.

W81XWH-16-1-0532 (PI: Hsieh) 09/01/2016-08/31/2020 (NCE) 0.40 Cal. Months
ARMY/DOD $126,000
Title: Epigenetic machinery regulates alternative splicing of androgen receptor (AR) gene in castration-resistant prostate cancer (CRPC)
Contact: Winter, Thomas (US Army MEDCOM USAMRAA (US), 820 Chandler Street, Fort Detrick, MD 21702-5014) mailto:thomas.s.winter2.civ@mail.mil
Goals: Overall goal is to explore combination KDM4B inhibitor with AR inhibitor to synergize the therapeutic effect of CRPC.
Aim 1: To establish that KDM4B promotes AR-V7 expression and identify the regulatory mechanisms.
Aim 2: To evaluate the clinical application of KDM4B inhibitors on CRPC tumors-expressing AR-V7.

W81XWH-16-1-0474 (PI: Hsieh) 09/15/2016-09/14/2020 (NCE) 0 Cal. Months
ARMY/DOD $114,920
Title: An association of unique microRNA turnover machinery with prostate cancer progression

Contact: Desir, Mirlene (US Army Medical Research Acquisition Activity (USAMRAA), 820 Chandler Street, Fort Detrick, MD 21702-5014) mirlene.desir.civ@mail.mil
Goals: Overall goal is to characterize the role of IFIT-5 in microRNA turnover.
Aim 1: To dissect the mechanism of IFIT5-mediated miRNA turnover.
Aim 2: To determine the regulation and role of IFIT5 gene in PCa progression.
Aim 3: To evaluate IFIT5 as a prognostic marker using liquid biopsy.

PC160334P1 (PI: Hsieh) 03/01/18-02/28/21 0.6 CM (5%)
CPRIT $285,009
Title: Novel Injectable Device for Trapping and Eradicating Metastatic Prostate Cancer
Goals: The proposed research is designed to achieve several objectives. First, biodegradable, injectable and thermogelling PEG-PAA microparticles will be synthesized to serve as the building block and slow release vehicle of PCa-specific Cancer Traps. Second, selected chemokines will be incorporated into PEG-PAA particles to promote PCa cell recruitment. Third, the surface of PEG-PAA particles will be conjugated with PSMA ligands to interact with and then arrest incoming PCa cells inside the cancer traps. Fourth, Cancer Traps will be fabricated for either chemotherapy or radiation therapy.
Aims: (1) Fabricate and optimize Cancer Trap design to capture and then eradicate metastatic PCa cells *in vitro*; (2) Determine therapeutic efficacy of cancer traps *in vivo*.
Role: Collaborator

RP180200 (PI: Hsieh) 03/01/18-02/28/21 1.8 CM (15%)
CPRIT $855,027
Title: Targeting androgen receptor splice variants in castration resistant prostate cancer with a cancer specific theranostic
Goals: The objective of this research is to delineate underlying mechanism of AR variant expression by identifying key regulator(s) and then determine their potential clinical significance. Furthermore, we will develop new therapeutic regimen using clinically relevant xenograft model.
Aims: (1) Delineate the role of epigenetic enzymes associated with spliceosome factor(s) in AR variant gene splicing and determine potential clinical correlation; (2) Evaluate the therapeutic efficacy of these inhibitors.
Role: Collaborator

RP180192; (PI: Brugarolas) 03/01/2018-02/28/2021 1.20 Cal. Months
CPRIT $284,251
Title: Dissecting the interplay between BAP1 and PBRM1 in renal cancer
Contact: Heidi McConnell (Cancer Prevention and Research Institute of Texas, 211 E. 7th Street, Suite 300, Austin, TX 78701)
Goal 1: Molecular analysis of *BAP1-PBRM1* double-mutant tumors
Aim 1 – Evaluation of a permissive context for co-mutation through exome sequencing
Aim 2 – Evaluation of the impact on gene expression of combined inactivation of *BAP1* and *PBRM1*
Goal 2: Dissecting the interplay between *Bap1* and *Pbrm1* through gene editing and combined targeting in the mouse
Aim 1 – Use CRISPR/Cas9 to introduce *LoxP* sites into the *Bap1* locus of *Pbrm1*-conditional mice
Aim 2 – Evaluation of the impact on mouse development of combined inactivation of *Bap1* and *Pbrm1*
Aim 3 – Targeted inactivation of *Bap1* and *Pbrm1* in the mouse kidney

1P50 CA196516-01A1 (PI: Brugarolas) 08/01/2016-07/31/2021 0.96 Cal. Months
NIH/NCI $1,350,895
Title: UTSW SPORE in Kidney Cancer (Project 2, Core B, CDP)
Contact: Wlodek Lopaczynski, NIH Scientific Review Administrator, 240-276-6458, lopacw@mail.nih.gov
Aim 1. Determine the prognostic and predictive value of BAP1 in metastatic ccRCC
Aim 2. Create the first immunocompetent mouse model of ccRCC through the simultaneous inactivation of Vhl and Bap1 in the adult kidney

Aim 3. Discover targets for drug intervention through the unbiased identification of BAP1 substrates

Pilot Grant (PIs: Rajaram and Kapur)	10/01/18-08/01/21	0.0 Cal. Months
Lyda Hill Department of Bioinformatics, UTSW	$55,250 total DC	

Title: Tissue Morphology as a Readout of Tumor Evolution
Contact: Denise Canales, 5232 Harry Hines Blvd, MC9365, Dallas, TX, 75391
Goals: The purpose of this grant is to test whether tissue morphology can be used as a readout of tumor evolution.
Aims: 1) Build a classifier to predict, from H&E images, whether different tumor regions from the same patient belong to distinct "clones". 2) Predict metastatic potential using the matched metastatic/thrombus tumors.
Name and address of grants officer on sponsor award notice:
Role: co-PI (with Dr. Satwik Rajaram)
Overlap: The aims of this grant, to relate tissue morphology and molecular state, are separate from the current proposal. However, the multi-region sequencing data generated (titled UTSW Sequencing) using this pilot funding will be used in Aims 1 and 2 of the current proposal.

Current Research Support

R01DK115986-01A1 (PI: Zheng)	06/15/2018-06/30/2022	0.60 Cal. Months
University of Texas at Dallas/NIH-NIDDK	$10,924 (subaward)	

Title: Glomerular Filtration of Sub-nm Gold Nanoparticles
Contact: Gossett, Daniel Robert; daniel.gossett@nih.gov
Goals: To fundamentally understand the glomerular filtration of a class of sub-nm AuNPs with different sizes and surface chemistries, unravel in vivo nano-bio interactions in the glomeruli at the molecular level, and explore the feasibility of utilizing the interactions for early detection of drug-induced glomerular injury noninvasively with in vivo fluorescence and X-ray imaging.
Aim 1: To investigate glomerular filtration of sub-nm AuNPs with well-defined size and surface chemistries.
Aim 2: To investigate glomerular filtration of sub-nm AuNPs with well-controlled GEnG degradation.
Aim 3: To apply near infrared (NIR)-emitting sub-nm AuNPs for early detection of GEnG injury in the preclinical settings.

1P50 CA196516-01A1 (PI: Brugarolas)	08/01/2016-07/31/2022	2.46 Cal. Months
NIH-NATIONAL CANCER INSTITUTE	$10,971,000	

Title: UTSW SPORE in Kidney Cancer
Contact; N/A
Major Goals:
Aim 1: Determine the prognostic and predictive value of BAP1 in metastatic ccRCC.
Aim 2: Create the first immunocompetent mouse model of ccRCC through the simultaneous inactivation of Vhl and Bap1 in the adult kidney.
Aim 3: Discover targets for drug intervention through the unbiased identification of BAP1 substrates

W81XWH1910710 (PI: Hannan)	09/30/2019-09/29/2022	0.60 Cal. Months
U.S. Department of Defense	$91,578	

Title: Immune Checkpoint Targeted Immuno-PET to Identify Therapy-Induced Adaptive Resistance
Contact; N/A
Goals: Future of personalized cancer therapy, especially in advanced cancers, relies on in vivo continued monitoring of treatment to predict as earliest possible the resistance/failure to treatment, to identify any de novo tumor escape mechanism, and to determine the best alternative approach to overcome cancer progression with final goal of prolonging survival, if curing is not yet achievable

Aim 1: Establish standard operating procedures (SOPs) to prepare and formulate 89Zr-atezolizumab whilepreserving its immunoreactivity.
Aim 2: Perform Immuno-PET in mouse models to validate imaging methods (imaging data acquisition, quantitative data analysis, and bio-distribution) and their correlation with IHC.
Aim 3: Evaluate the correlation of Immuno-PET detected changes in tumor PD-L1 expression with IHC in mice treated with ICI and with and without SAbR regimen.

RP200233 (PI: Hsieh) 03/01/2020-02/28/2023 0.36 Cal. Months
UTD Sub/CPRIT $63,373
Title: Advancing CT and fluorescence imaging of kidney cancers with glutathione-mediated contrast enhancements
Contact: Danielle Lissberger, Office of Sponsored Projects, The University of Texas at Dallas, 800 W. Campbell Road, Richardson, TX 75080, 972.883.4572, Danielle.Lissberger@utdallas.edu
Goals: The goal is to develop glutathione-mediated and ICG-conjugated gold nanoclusters for fluorescence and CT imaging of RCC (ccRCC and pRCC) at high and positive contrast.
Aims: (1) To develop glutathione-activatable and clearable ICG-AuNCs; (2) To fluorescently image RCC tumors with different sized ICG-AuNCs; (3) To conduct CT imaging of RCC with different sized ICG-AuNCs

W81XWH-21-1-0630 (PI: Kapur) 09/01/2021-08/31/2024 1.2 Cal. Months
U.S. Department of Defense $ 980,839
Title: Leveraging Digital Pathology and Deep Learning to Predict Immunotherapy Response
Contact; N/A
Major Goals:
Aim 1: Validate identification of immune and vascular cells in H&E images from IMmotion150.
Aim 2: Establish a deep learning pipeline to predict transcriptomic signatures on IMmotion150.
Aim 3: Develop a deep learning pipeline to predict treatment response using IMmotion150 and validate on IMmotion151 clinical trial data.

2R01CA154475-06A1 (PI: Pedrosa) 02/01/2019-01/31/2025 1.2 Cal. Months
NIH-NATIONAL CANCER INSTITUTE $356,556
Title: Non-invasive physiologic predictors of aggressiveness in renal cell carcinoma (PI: Pedrosa)
Contact: Dena Solomon, National Cancer Institute, 6120 Executive Blvd. Bethesda, MD 20892
Goal: To determine the ability of arterial spin labeling (ASL) and Dixon magnetic resonance imaging (MRI) to predict underlying molecular alterations in clear cell renal cell carcinoma and the response to HIF-2 inhibition therapy based on the non-invasive determination of tumor perfusion and lipid content.
Aim 1: Assess MRI measurements of lipid accumulation and blood flow in primary ccRCC *in vivo* as predictive biomarkers of the pathologic and molecular alterations in the same tumor after nephrectomy.
Aim 2: To characterize the intra-tumoral heterogeneity of lipid accumulation and blood flow in ccRCC.
Aim 3: To assess MRI measurements of lipid accumulation and blood flow in ccRCC tumorgrafts as predictive (3a) and response (3b) biomarkers to HIF-2 inhibition (HIF2-I) therapy.

RP220201 (PI: Carroll) 03/01/2022-02/28/2025 0.60 Cal. Months
UTD Sub/CPRIT $1,040,229
Title: Determining the mechanisms underlying sarcomatoid differentiation in renal cell carcinoma
Contact: N/A
Major Goals: Goal 1) Characterize molecular pathology of sRCC; Goal 2) Determine the role of Srf in sarcomatoid differentiation and metastasis.

Aim 1: Define properties of Yap-active RCCs that will enhance diagnosis and treatment.
Aim 2: Characterize the role of Srf in sarcomatoid differentiation and metastasis in Lats mutant tumors

RP220294 (PI: Rajaram & Kapur)	03/01/2022-02/28/2025	1.80 Cal. Months
UTD Sub/CPRIT	$1,172,136	

Title: Dissecting Intratumor Heterogeneity in Kidney Cancer Using Deep Learning
Contact: N/A
Major Goals: Goal 1: Develop a metric-learning approach to demarcate regions in different morphological/molecula states on a hematoxylin and eosin [H&E] stained slides; Goal 2: Predict transcriptionally defined clades purely from ccRCC H&E images in clinical trial datasets; Goal 3: Build and validate a model that can account for ITH to predict response to ICI and AA therapies, purely from H&E images.

Aim 1: Optimize a metric-learning approach to demarcate regions reflecting different molecular states.
Aim 2: Identify morpho-genomic clades predictive of response by leveraging clinical trial datasets.
Aim 3: Deploy a morpho-genomic biomarker transcending ITH to predict therapy response using a real-world datas

1R01CA244579-01A1 (PI: Mason)	07/01/20-06/30/25	0.6 Cal. Months
NIH-NATIONAL CANCER INSTITUTE	$340,199	

Title: Vascular image-guided optimization of response (VIGOR) to therapy in kidney cancer (PI: Mason)
Contact: Fu, Yali, fuyali@mail.nih.gov
Goals & Aims: Our ultimate goal is to eliminate the mortality associated with metastatic breast cancer through treatment regimens with drugs that are designed to non-cytotoxic until they reach hypoxic regions in tumors and become activated as highly potent.

1R01CA252281-01A1 (PI: Vinogradov)	04/01/2021 – 04/30/2026	0.0 Cal. Months
NIH-NATIONAL CANCER INSTITUTE	$368,522 annual DC	

Title: Chemical Exchange Saturation Transfer (CEST) MRI for the Characterization Small Renal Masses
Contact: Rachel Phillips (grants.mgt@utsouthwestern.edu)
Goals: The goal of this project is to develop and validate endogenous CEST MRI for the characterization of Small Renal Masses.
Aims: 1: To develop and optimize CEST methodology for SRMs on 3T human MRI system; 2: To evaluate the optimized CEST-MRI as a biomarker of SRM histology.

Description of a few key Publications

I am a surgical pathologist with morphologic expertise in genitourinary oncology, in particular renal, prostate, and urothelial carcinomas. My research is focused on characterizing adult cancers and developing prognostic, therapeutic, and diagnostic molecular markers. I have collaborated on multiple clinical projects where my role as a pathologist included building tissue microarrays, optimizing, validating, and analyzing novel IHC based biomarkers to help better characterize cancers for prognostic and therapeutic purposes, and providing expert morphologic opinion on both human and mouse tumors. Several studies have been published as a result of these collaborations.

During the past six years, much of my research contributions has been in the field of kidney cancer. At Simmons Cancer Center, Kidney Cancer is the 4th most common cancer type and the only one with a Program and a SPORE (Specialized Programs of Research Excellence). Under the leadership of Dr. James Brugarolas (Department of Internal Medicine, Division of Oncology; PI of the Kidney Cancer SPORE grant) the Kidney Cancer Program was founded in 2013. Our KCP team comprises exceptionally collegial multidisciplinary group of experts who come together to address critical questions in adult and pediatric kidney cancer. I am privileged to be the pathology leader for our Kidney Cancer Program. I meet with Dr. Brugarolas and other members of the team every week and discuss ongoing projects. We brainstorm ideas and discuss clinical scenarios that drive new projects and building the Kidney Cancer Program. Further, I believe that availability of high quality biospecimens is quintessential to research. I have therefore made myself available to procure tissue samples at all hours and providing morphologic opinion when needed. For the past 2-3 years, one of my significant time commitments has been the development of Kidney Cancer

Explorer (KCE), a powerful informatics system that integrates up-to-date clinical-pathological data with high-dimensional genomics and research samples into a unified database that supports powerful analytical tools for integrative studies. We believe that KCE will be instrumental in correlative and translational studies and will significantly promote collaborations. I feel privileged to be able to contribute towards these significantly impactful projects. Below, I highlight a few of the manuscripts that I have contributed towards, many of which laid the foundation for Kidney Cancer SPORE application's Project 2, of which I am the principal investigator.

1. *Peña-Llopis S, Vega-Rubín-de-Celis S, Liao A, Leng N, Pavía-Jiménez A, Wang S, Yamasaki T, Zhrebker L, Sivanand S, Spence P, Kinch L, Hambuch T, Jain S, Lotan Y, Margulis V, Sagalowsky AI, Summerour PB, Kabbani W, Wong SW, Grishin N, Laurent M, Xie XJ, Haudenschild CD, Ross MT, Bentley DR,* ***Kapur P****, Brugarolas J. BAP1 loss defines a new class of renal cell carcinoma. Nat Genet. 2012 Jun 10;44(7):751-9. PubMed PMID: 22683710; PubMed Central PMCID: PMC3788680.*

   Journal Impact factor: 27.959
   Google scholar citation count as of 10/18/2017: 382
   Summary: Using whole genome and exome sequencing in 176 clear cell renal cell carcinomas (ccRCCs), we showed that BAP1 is inactivated in 15% of ccRCCs. We showed that BAP1 mutations are typically associated with loss of the protein. We discovered that somatic mutations in BAP1 and PBRM1 in ccRCC are largely mutually exclusive. Importantly, whereas BAP1-mutant tumors tend to be of high grade and may show tumor necrosis, PBRM1-mutant tumors tend to be of low grade and are less frequently necrotic. These data set the foundation for the first molecular genetic classification of sporadic ccRCC.
   My contribution: I was involved with developing a novel IHC test for BAP1 in our laboratory that has outstanding positive and negative predictive values. Most mutations in BAP1 are predicted to abolish protein expression and therefore an IHC test could be developed. Using genetically characterized ccRCC tumor samples validated by Western blot as controls, I developed this IHC assay with an antibody raised against the C-terminus of BAP1. We evaluated the IHC test in a cohort of 176 tumors with BAP1 sequencing results that I was blinded to. 175 out of 176 tumors were interpretable. Of these, 150 cases showed positive nuclear staining and 148 were wild-type. The 2 discordant cases had missense mutations. Twenty-five cases were negative by IHC and included 22 cases with BAP1 mutations. Three samples lacking a mutation did not express BAP1 protein on Western blot. Thus, the IHC test picked up 25 out of 27 BAP1-deficient cases. The positive (BAP1 loss) and negative predictive values of the IHC test were 92% and 98% respectively. We now offer this test in the clinical setting to all patients treated at UTSW for ccRCC. I also evaluated the morphology of these 176 ccRCCs and assessed the grade and presence of necrosis and sarcomatoid features in these tumors. I also standardized and evaluated IHC for PBRM1, which led to the discovery that somatic mutations in BAP1 and PBRM1 in ccRCC are largely mutually exclusive. I also supervised staining and evaluated these cases for both S6RP phosphorylation and 4E-BP1 phosphorylation, two markers of mTORC1 activity. These data showed that BAP1-mutant tumors but not PBRM1-mutant tumors, correlated with S6RP phosphorylation (p=0.0008) and 4E-BP1 phosphorylation (p=0.009).
   https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3788680/

2. ***Kapur P****, Peña-Llopis S*, Christie A, Zhrebker L, Pavía-Jiménez A, Rathmell WK, Xie XJ, Brugarolas J. Effects on survival of BAP1 and PBRM1 mutations in sporadic clear-cell renal-cell carcinoma: a retrospective analysis with independent validation. Lancet Oncol. 2013 Feb;14(2):159-67. PubMed PMID: 23333114.*

   Journal Impact factor: 33.90
   Google scholar citation count as of 10/18/2017: 211
   Summary: Given the associations between BAP1 and PBRM1 with Fuhrman grade, we hypothesized that BAP1- and PBRM1-deficient tumors may be associated with different outcomes in patients. To evaluate this hypothesis, we retrieved clinical and pathologic information from 176 patients with known BAP1 mutation status. Median overall survival (OS) was significantly shorter for patients with BAP1-mutant tumors (4.6 years; 95% CI 2.1–7.2) than for patients with PBRM1-mutant tumors (10.6 years; 95% CI 9.8–11.5), corresponding to a HR of 2.7 (95% CI 0.99–7.6, p=0.044). We validated the results in a second independent cohort from TCGA. The results were similar with a HR of 2.8 (95% CI 1.4–5.9; p=0.004). Since our publication, these results have been

reproduced by four studies. We also showed that PBRM1- and BAP1-mutant tumors are associated with characteristic, but independent, gene expression signature.

My contribution: My role in these studies involved standardization, validation, and evaluation of IHCs, collection of clinical and pathologic data, morphologic assessment, and writing the manuscript as the lead author

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4674067/

3. ***Kapur*** *P*, Christie A*, Raman JD, Then MT, Nuhn P, Buchner A, Bastian P, Seitz C, Shariat SF, Bensalah K, Rioux-Leclercq N, Xie XJ, Lotan Y, Margulis V, Brugarolas J. BAP1 immunohistochemistry predicts outcomes in a multi-institutional cohort with clear cell renal cell carcinoma. J Urol. 2014 Mar;191(3):603-10. PubMed PMID: 24076305.*

Journal Impact factor: 5.157

Google scholar citation count as of 10/18/2017: 33

Summary: Using the BAP1 IHC assay developed by me, we examined the effects of BAP1 loss on patient outcomes. We evaluated 559 non-metastatic ccRCCs in a multi-institutional tissue microarray and found that BAP1 negative tumors were associated with significantly worse disease-free survival (HR, 2.9; 95% CI, 1.8-4.7; p<0.0001) and OS (HR, 2.0; 95% CI, 1.3-3.1; p=0.001) than patients with BAP1 positive tumors.

My contribution: I was involved with collecting and organizing the tissue from outside institutions. I reviewed the histology of all 559 cases and selected areas for construction of the tissue microarray (TMA), supervised the construction of the TMA and immunohistochemical staining of the TMA sections. I evaluated the results of the immunostaining and oversaw of the statistical analysis. I wrote the manuscript as the lead author.

http://www.sciencedirect.com/science/article/pii/S0022534713055328?via%3Dihub

4. *Joseph RW*, Kapur P*, Serie DJ, Eckel-Passow JE, Parasramka M, Ho T, Cheville JC, Frenkel E, Rakheja D, Brugarolas J, Parker A. Loss of BAP1 protein expression is an independent marker of poor prognosis in patients with low-risk clear cell renal cell carcinoma. Cancer. 2014 Apr 1;120(7):1059-67. PubMed PMID: 24382589; PubMed Central PMCID: PMC4075029.*

Journal Impact factor: 6.072

Google scholar citation count as of 10/18/2017: 63

Summary: Our prior results were further expanded through collaboration with Mayo clinic. We performed BAP1 IHC on whole slides from their cohort of ~1,500 patients with non-metastatic ccRCC. This is one of the most comprehensive and well characterized cohort of ccRCC. In keeping with our previous results, we found that loss of BAP1 by IHC was associated with a markedly reduced rate of RCC-specific survival (HR, 3.06; 95% CI, 2.28 - 4.10; $p = 6 \cdot 10^{-14}$). Importantly, we found that BAP1 predicted outcome independently of known prognostic factors (including UISS [UCLA Integrated Staging System] nomogram) and in low SSIGN (Stage, Size, Grade, Necrosis) score patients.

My contribution: I supervised the conduction and validation of IHC in this cohort and evaluated IHC for BAP1 on ~1,500 slides from this cohort, and contributed to the writing of the manuscript.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4075029/

and

Joseph RW, **Kapur P***, Serie DJ, Parasramka M, Ho TH, Cheville JC, Frenkel E, Parker AS, Brugarolas J. Clear Cell Renal Cell Carcinoma Subtypes Identified by BAP1 and PBRM1 Expression. J Urol. 2016 Jan;195(1):180-7. PubMed PMID: 26300218; PubMed Central PMCID: PMC5221690.*

Journal Impact factor: 5.157

Google scholar citation count as of 10/18/2017: 46

Summary: Using IHC, we evaluated the outcome of patients with ccRCCs deficient for both BAP1 and PBRM1. In our studies of the Mayo cohort, we found 23 tumors (~2%) that were simultaneously deficient for both BAP1 and PBRM1. Consistent with our previous data, these tumors were under-represented (OR, 0.18; 95% CI, 0.11-

0.28; p<0.00001). These tumors were associated with the worst outcomes (median RCC-specific survival at 10 years of 42% vs. 87% for patients with BAP1+PBRM1+ tumors). Overall, our work shows that ccRCCs can be classified into four different molecular subtypes associated with step-wise worsening of outcomes: PBRM1+BAP1+ (reference), PBRM1-BAP1+ with HR, 1.394 (95% CI, 1.024 - 1.898; p = 0.03491); PBRM1+BAP1- with HR of 3.251 (2.177 - 4.856; $p = 8.4 \cdot 10^{-09}$); and PBRM1-BAP1- with HR of 5.2 (95% CI, 2.847 - 9.563; $p = 9.1 \cdot 10^{-08}$)

My contribution: I supervised the conduction and validation of IHC in this cohort and evaluated IHC for BAP1 and PBRM1 on ~1,500 slides from this cohort, and contributed to the writing of the manuscript.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5221690/

5. *Ho TH, **Kapur P***, Eckel-Passow JE, Christie A, Joseph RW, Serie DJ, Cheville JC, Thompson RH, Homayoun F, Panwar V, Brugarolas J, Parker AS. Multicenter Validation of Enhancer of Zeste Homolog 2 Expression as an Independent Prognostic Marker in Localized Clear Cell Renal Cell Carcinoma. J Clin Oncol. 2017 Oct 4: [Epub ahead of print] PubMed PMID: 28976794.*

Journal Impact factor: 24.008

Google scholar citation count as of 10/18/2017: 0

Summary: EZH2 is another attractive target in RCC. Our preliminary work in the same cohort of 176 ccRCCs shows that EZH2 identifies tumors that are highly aggressive and associated with poor patient survival (presented at USCAP pathology meeting). This manuscript builds on our collaboration with investigators at Mayo clinic that has proven very fruitful. We investigated the role of EZH2 in ccRCC by performing EZH2 IHC on ~1,500 RCC samples from patients seen at Mayo clinic with 15-year follow-up data. In the UTSW cohort, patients with EZH2-high protein expression were 2 times more likely to experience overall death than patients with EZH2-low expression (95% CI: 1.1-4.4, P=.034). Similarly, in the Mayo Clinic cohort, patients with EZH2-high protein expression were 1.4 times more likely to experience overall death (95% CI: 1.2-1.7, P=.00026). In the Mayo Clinic cohort, patients with EZH2-high protein expression were nearly two times more likely to experience RCC-specific death (95% CI: 1.5-2.6, P<.0001); EZH2 protein expression was particularly prognostic amongst low-risk SSIGN patients (HR=6.1, 95% CI: 3.4-11.1, P<.0001). Furthermore, inasmuch as EZH2 is not just a marker, but rather a driver of tumorigenesis, and inasmuch as EZH2 inhibitors are being developed, our work may pave the way for the next generation of targeted therapies in kidney cancer.

My contribution: I was involved with conceiving the study, standardized and validating the IHC, supervising the performance of the IHC and the digital imaging using Aperio whole slide scanner and manually reading the EZH2 IHCs on ~1,500 slides from the Mayo cohort and the UTSW TMA. I also supervised the construction of the UTSW TMA, extracted the clinical and pathological data of the UTSW cohort, and contributed to the writing of the manuscript.

http://ascopubs.org/doi/full/10.1200/JCO.2017.73.3238

6. *Wang SS, Gu YF, Wolff N, Stefanius K, Christie A, Dey A, Hammer RE, Xie XJ, Rakheja D, Pedrosa I, Carroll T, McKay RM, **Kapur P***, Brugarolas J*. Bap1 is essential for kidney function and cooperates with Vhl in renal tumorigenesis. Proc Natl Acad Sci U S A. 2014 Nov 18;111(46):16538-43. PubMed PMID: 25359211; PubMed Central PMCID: PMC4246264.*

Journal Impact factor: 9.661

Google scholar citation count as of 10/20/2017: 52

Summary: An important limitation of the kidney cancer field for many years has been the lack of a genetically engineered mouse model (GEMM) of ccRCC reproducing frequent genetic events. Dr. Brugarolas's laboratory generated mice that were Six2-Cre;VhlF/F;Bap1F/+ and we found that these mice developed a spectrum of pre-neoplastic cysts and RCC. These lesions were not found in Six2Cre;VhlF/F and Six2Cre;Bap1F/+ (or younger Six2Cre;Bap1F/F) control mice. Carbonic anhydrase IX (CAIX), a HIF-target and a classic marker of ccRCC, had a membranous staining pattern in cysts and neoplastic nodules. In addition, we observed an increase in phosphorylated S6 ribosomal protein (pS6) staining in the neoplastic nodules. These data unequivocally show, as we had hypothesized, that Vhl and Bap1 cooperate in ccRCC development.

My contribution: I reviewed the morphology of all the GEMM mice that were generated for this study. I also supervised the standardization and validation of IHCs on mouse tissue and evaluated them for this study.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4246264/

7. *Gu YF, Cohn S, Christie A, McKenzie T, Wolff NC, Do QN, Madhuranthakam A, Pedrosa I, Wang T, Dey A, Busslinger M, Xie XJ, Hammer RE, McKay RM,* ***Kapur P****, Brugarolas J*. Modeling Renal Cell Carcinoma in Mice: Bap1 and Pbrm1 Inactivation Drive Tumor Grade. Cancer Discov. 2017 May 4. PubMed PMID: 28473526.*

Journal Impact factor: 20.011
Google scholar citation count as of 10/20/2017: 4
Summary: Using a 2nd cre driver (PAX8) we conditionally targeted Bap1 and Pbrm1 (along with Vhl) in mouse and we found that this led to ccRCC of different grade similar to our observations in humans. In addition, disrupting one allele of Tsc1, in Pbrm1 deficient mice kidneys triggered higher-grade ccRCC. The histologic changes in these mice suggested that ccRCC might arise from Bowman capsule cells.
My contribution: My role in these studies involved morphologic assessment of the GEMM mice kidneys, standardization and evaluation of IHCs reactive to mouse tissue, analysis of the data, and preparation of the manuscript.
http://cancerdiscovery.aacrjournals.org/content/7/8/900.long

8. *Durinck S*, Stawiski EW*, Pavía-Jiménez A*, Modrusan Z*,* ***Kapur P****, Jaiswal BS, Zhang N, Toffessi-Tcheuyap V, Nguyen TT, Pahuja KB, Chen YJ, Saleem S, Chaudhuri S, Heldens S, Jackson M, Peña-Llopis S, Guillory J, Toy K, Ha C, Harris CJ, Holloman E, Hill HM, Stinson J, Rivers CS, Janakiraman V, Wang W, Kinch LN, Grishin NV, Haverty PM, Chow B, Gehring JS, Reeder J, Pau G, Wu TD, Margulis V, Lotan Y, Sagalowsky A, Pedrosa I, de Sauvage FJ, Brugarolas J, Seshagiri S. Spectrum of diverse genomic alterations define non-clear cell renal carcinoma subtypes. Nat Genet. 2015 Jan;47(1):13-21. PubMed PMID: 25401301.*

Journal Impact factor: 27.959
Google scholar citation count as of 10/20/2017: 91
Summary: Using DNA and RNA samples from our tissue bank, we have successfully collaborated with Genentech in publishing the first comprehensive genomic analysis comparing renal oncocytoma and different subtypes of non-clear-cell RCC (nccRCC) including papillary RCC (pRCC), chromophobe RCC (chRCC), translocation RCC and unclassified RCC. This study of 167 tumors significantly extends the findings from the TCGA on 66 chRCC. We found many novel mutations that may be implicated in nccRCC pathogenesis and a 5-gene signature set that distinguishes the nccRCC subtypes. The finding that pRCC tumors have more mutations than ccRCC tumors and consequently may have more neoantigens may be important in the development of immunotherapies. Our assessment of morphology and in situ hybridization analyses helped determine that the definition of translocation RCCs needs to be expanded to include novel translocations (involving, for example, MITF) and other genetic changes (such as amplification). Our discovery that eosinophilic chRCC lacks characteristic DNA copy number alterations will facilitate clinical recognition of this unique subtype.
My contribution: I was involved with QA of the flanking sections of the tissue submitted for DNA and RNA extraction. I reviewed the morphology of all the clinical specimens to assess the morphologic subtypes and supervised the FISH and IHC analysis. I also contributed to the writing of the manuscript.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4489427/

9. *Chen W, Hill H, Christie A, Kim MS, Holloman E, Pavia-Jimenez A, Homayoun F, Ma Y, Patel N, Yell P, Hao G, Yousuf Q, Joyce A, Pedrosa I, Geiger H, Zhang H, Chang J, Gardner KH, Bruick RK, Reeves C, Hwang TH, Courtney K, Frenkel E, Sun X, Zojwalla N, Wong T, Rizzi JP, Wallace EM, Josey JA, Xie Y, Xie XJ,* ***Kapur P****, McKay RM, Brugarolas J. Targeting renal cell carcinoma with a HIF-2 antagonist. Nature. 2016 Nov 3;539(7627):112-117. PubMed PMID: 27595394; PubMed Central PMCID: PMC5340502.*

Journal Impact factor: 40.1137
Google scholar citation count as of 10/20/2017: 57

Summary: Herein we used our patient derived tumorgraft (PDX) platform to evaluate a novel HIF2 inhibitor (PT2399). We showed that PT2399 suppressed growth in 56% of the ccRCC PDXs, and that it had greater activity than sunitinib and was better tolerated. We identified a HIF-2-dependent gene signature in sensitive tumors. We validated HIF-2 as a target in ccRCC, showed that some ccRCCs are HIF-2 independent, and set the stage for biomarker-driven clinical trials.

My contribution: I was involved in assessing the histology of these tumors both pre and post treatment. I was also involved with standardizing and validation of the HIF1 and HIF2 IHCs. I also supervised CD34 IHC and evaluated the micro vessel density using image analysis.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5340502/

10. *Weinstein J.N., Akbani R., Broom B.M., Wang W., Verhaak R.G.W., McConkey D., Lerner S., Morgan M., Creighton C.J., Smith C., Cherniack A.D., Kim J., Pedamallu C.S., Noble M.S., Al-Ahmadie H.A., Reuter V.E., Rosenberg J.E., F.Bajorin D., Bochner B.H., Solit D.B., Koppie T., Robinson B., Gordenin D.A., Fargo D., Klimczak L.J., Roberts S.A., Au J., Laird P.W., Hinoue T., Schultz N., Ramirez R., Hansel D., Hoadley K.A., Kim W.Y., Damrauer J.S., Baylin S.B., Mungall A.J., Robertson A.G., Chu A., Kwiatkowski D.J., Sougnez C., Cibulskis K., Lichtenstein L., Sivachenko A., Stewart C., Lawrence M.S., Getz G., Lander E., Gabrie S.B., Donehower L., Carter S.L., Saksena G., Schumacher S.E., Freeman S.S., Jung J., Bhatt A.S., Pugh T., Beroukhim R., Meyerson M., Ally A., Balasundaram M., Butterfield Y.S.N., Dhalla N., Hirst C., Holt R.A., Jones S.J.M., Lee D., Li H.I., Marra M.A., Mayo M., Moore R.A., Schein J.E., Sipahimalani P., Tam A., Thiessen N., Wong T., Wye N., Bowlby R., Chuah E., Guin R., Shen H., Bootwalla M.S., Triche Jr. T., Lai P.H., Van Den Berg D.J., Weisenberger D.J., Balu S., Bodenheimer T., Hoyle A.P., Jefferys S.R., Meng S., Mose L.E., Simons J.V., Soloway M.G., Wu J., Parker J.S., Hayes D.N., Roach J., Buda E., Jones C.D., Mieczkowski P.A., Tan D., Veluvolu U., Waring S., Auman J.T., Perou C.M., Wilkerson M.D., Santoso N., Parfenov M., Ren X., Pantazi A., Hadjipanayis A., Seidman J., Kucherlapati R., Lee S., Yang L., Park P.J., Xu A.W., Protopopov A., Zhang J., Bristow C., Mahadeshwar H.S., Seth S., Song X., Tang J., Zeng D., Chin L., Guo C., Casasent T.D., Liu W., Ju Z., Motter T., Peng B., Ryan M., Su X., Yang J.-Y., Lorenzi P.L., Yao H., Zhang N., Zhang J., Mills G.B., Cho J., DiCara D., Frazer S., Gehlenborg N., Heiman D.I., Lin P., Liu Y., Stojanov P., Voet D., Zhang H., Zou L., Bernard B., Kreisberg D., Reynolds S., Rovira H., Shmulevich I., Gao J., Jacobsen A., Aksoy B.A., Antipin Y., Ciriello G., Dresdner G., Gross B., Lee W., Reva B., Shen R., Sinha R., Sumer S.O., Weinhold N., Ladanyi M., Sander C., Benz C., Carlin D., Haussler D., Ng S., Paull E., Stuart J., Zhu J., Liu Y., Zhang W., Taylor B.S., Lichtenberg T.M., Zmuda E., Barr T., Black A.D., George M., Hanf B., Helsel C., McAllister C., Ramirez N.C., Tabler T.R., Weaver S., Wise L., Bowen J., Gastier-Foster J.M., Jian W., Tello S., Ittman M., Castro P., McClenden W.D., Gibbs R., Saller C., Tarvin K., DiPiero J.M., Owens J., Bollag R., Li Q., Weinberger P., Czerwinski C., Huelsenbeck-Dill L., Iacocca M., Petrelli N., Rabeno B., Swanson P., Shelton T., Curley E., Gardner J., Mallery D., Penny R., Van Bang N., Hanh P.T., Kohl B., Van Le X., Phu B.D., Thorp R., Tien N.V., Vinh L.Q., Sandusky G., Burks E., Christ K., Gee J., Holway A., Moinzadeh A., Sorcini A., Sullivan T., Garcia-Grossman I.R., Regazzi A.M., Boice L., Rathmell W.K., Thorne L., Bastacky S., Davies B., Dhir R., Gingrich J., Hrebinko R., Maranchie J., Nelson J., Parwani A., Bshara W., Gaudioso C., Morrison C., Alexopoulou V., Bartlett J., Engel J., Kodeeswaran S., Antic T., O'Donnell P.H., Smith N.D., Steinberg G.D., Egea S., Gomez-Fernandez C., Herbert L., Jorda M., Soloway M., Beaver A., Carter S.,* ***Kapur P****., Lewis C., Lotan Y., Bondaruk J., Czerniak B., Skinner E., Aldape K., Jensen M.A., Kahn A.B., Pihl T.D., Pot D.A., Srinivasan D., Wan Y., Ferguson M.L., Zenklusen J.C., Davidsen T., Demchok J.A., Shaw K.R.M., Sheth M., Tarnuzzer R., Wang Z., Yang L., Hutter C., Ozenberger B.A., Sofia H.J., Eley G. Comprehensive molecular characterization of urothelial bladder carcinoma. Nature. 2014 Mar 20;507(7492):315-22. PubMed PMID: 24476821; NIHMSID: NIHMS551110; PubMed Central PMCID: PMC3962515.*

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Summary: As part of The Cancer Genome Atlas project, we reported an integrated analysis of 131 urothelial carcinomas to provide a comprehensive landscape of molecular alterations. There were statistically significant recurrent mutations in 32 genes, including multiple genes involved in cell-cycle regulation, chromatin regulation, and kinase signaling pathways, as well as 9 genes not previously reported as significantly mutated in any cancer.

My contribution: My role in this project was to provide high quality chemo-naïve, fresh urothelial carcinoma samples from patients treated at UTSW. I was also involved with centralized review of histology slides and pathology reports for these specimens.
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To conclude, my research contributions over the past sixteen years have spanned a spectrum of clinical and translational projects studying genitourinary cancers. These collaborations have laid the foundation for ongoing multi-institutional collaborations especially in renal cell carcinoma. Our studies have contributed towards better understanding of genitourinary cancer. Along with my collaborators, I continue to investigate molecular pathways of renal carcinogenesis and identify prognostic/ predictive markers to accurately stratify recurrences/ metastases in these patients, with the ultimate goal of better patient management.