

#SBUR2023

Advances in Basic Urological Research: Cellular Diversity and Crosstalk

NOVEMBER 9-12, 2023 | SAN ANTONIO, TEXAS

Program Committee

Program Committee Chair: Li Xin, PhD Head of Abstract Committee: Qianben Wang (2025 Chair) Fundraising Subcommittee: David DeGraff, PhD (2024 Chair) Annual Meeting Program Advisor: Larisa Nonn, PhD and Shawn Lupold, PhD (2022 Co-Chairs) Current President (ex officio): Will Ricke, PhD Past President (ex officio): Haojie Huang, PhD Member: Indira Mysorekar, PhD Member: Maria Hadjifrangiskou, PhD Member: Tanya Stoyanova, PhD Member: Jennifer Wu, PhD

Highlights

Leland W.K. Chung Lecturer Owen Witte, MD Immune Targeting Strategies for Prostate Cancer

AUA Lecturer Aria Olumi, MD Alternative Androgen-Independent Pathways for Prostatic Growth

## AGENDA

THURSDAY, NOVEMBER 9, 2023 (All Times are in Central Time		(All Times are in Central Time Zone)	
3:00 pm - 5:30 pm	Trainee Affairs Symposium John Lee, MD, PhD, Trainee Affairs Committee Chair	Crystal & Yellow Rose Ballroom	
3:00 pm - 3:30 pm	How to Gain Bioinformatic/Technical Training Antonina Mitrofanova, PhD		
3:30 pm - 3:45 pm	Q&A		
3:45 pm - 4:45 pm	Career Panel Discussion (Industry, NIH and Academia) Antonina Mitrofanova, PhD, Ayesha Shafi, PhD, Magdalena Grabowska, PhD, Alan Lombard, PhD, and Susan Lim, PhD		
4:45 pm - 5:15 pm	Grant Writing Tips (F31/F32/K01 - Early Career Grants) Susan Lim, PhD		
5:15 pm - 5:30 pm	Q&A		
	SBUR ANNUAL MEETING BEGINS		
6:00 pm - 6:10 pm	Welcome and Introductory Remarks Will Ricke, PhD, SBUR President		
6:10 pm - 7:10 pm	Leland W.K. Chung Lecture "Immune Targeting Strategies for Prostate Cancer" Owen Witte, MD		
7:10 pm - 7:30 pm	EULA and Donald S. Coffey Innovative Research Award Short Talks		
7:10 pm - 7:15 pm	UCHL1 is a Molecular Indicator and a Therapeutic Target for Neuroendocrine Prostate Cancer Shiqin Liu, MD, PhD		
7:15 pm - 7:20 pm	Targeting SOX2 via the IGF1R-AKT-CREB1 Pathway Increases Enzalutamide Sensitivity in Castration-Resistant Prostate Cancer Jordan Vellky, PhD		
7:20 pm - 7:25 pm	Targeting Undruggable Transcription Factor HOXB13 in Metastatic Prostate Cancer by CRISPR/ Cas13d-Based Nanoparticle Therapy <i>Zhifen Cui, PhD</i>		
7:30 pm - 8:30 pm	Networking and Welcome Reception Blue Bo	nnet, Magnolia Room, & Gunter Terrace	



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FRIDAY, NOVEMBER 10, 2023 (All Times are in Central		lime Zone)
7:00 am - 9:00 am	SBUR Board Meeting Mahncke Ro	oom
9:00 am - 11:30 am	Plenary Session 1: New Models and Technologies for Urological Research	
	Moderators: Travis Jerde, PhD and Rosalyn Adam, PhD	
9:00 am - 9:25 am	Chronic Pelvic Pain: Experimental Findings in Animal Models And Potential Therapeutics Kenny Roman, PhD	
9:25 am - 9:50 am	3D Spatial Biology Nicholas Reder, MD, MPH	
9:50 am - 10:15 am	Targeting Undruggable Transcription Factors in Lethal Prostate Cancer by CRISPR/Cas13-Based Nanotherapy <i>Qianben Wang, PhD</i>	
10:15 am - 10:30 am	Travel Award Presentation #1: Selective Inhibition of PP5 as a Therapeutic Strategy in Renal Cancer Jennifer Heritz, BS	
10:30 am - 10:55 am	Experimental Evolutionary Approaches for Investigating the Urobiome Megan Behringer, PhD	
10:55 am - 11:20 am	Novel Mechanism-Centric Network-Based Algorithms to Elucidate Therapeutic Response in Prostate Cancer Antonina Mitrofanova, PhD	
11:20 am - 11:30 am	Coffee Break	
11:30 am - 11:50 am	AUA Office of Research Update Christine Riordan, PhD, LCSW-C	
11:50 am - 12:50 pm	Lunch	
12:50 pm - 2:45 pm	Plenary Session 2: Cellular Heterogeneity and Interaction in Urological Tissues Moderators: Donald Vander Griend, PhD and Cindy Miranti, PhD	
12:50 pm - 1:15 pm	A Cellular Atlas of the Human Lower Urinary Tract Douglas Strand, PhD	
1:15 am - 1:40 pm	Nuclear Receptors Regulate the Urothelial Differentiation Program in Homeostasis, Regeneration and Bladder Cancer Cathy Mendelsohn, PhD	
1:40 pm - 1:55 pm	Travel Award Presentation #2: Notch Signaling Regulates Uroplakin Expression in Renal Urothelium Felipe Rodriguez-Tirado, PhD	
1:55 pm - 2:20 pm	Stromal Androgen Signaling Acts as Stem Cell Niches in Prostate Development and Morphogenesis Zijie Sun, MD, PhD	
2:20 pm - 2:45 pm	New Insights into Kidney Innervation: From Form to Functional Roles in Development Lori O'Brien, PhD	
2:45 pm - 2:55 pm	Coffee Break	
2:55 pm - 4:50 pm	Plenary Session 3: Genetic and Epigenetic Alterations of Epithelia in Urological Pathologies Moderators: Tanya Stoyanova, PhD and Xiaoqi Liu, PhD	5
2:55 pm - 3:20 pm	Modeling AR Reprogramming in Prostate Cancer Pathogenesis Christopher Barbieri, MD, PhD	
3:20 pm - 3:45 pm	Modulation of Androgen Receptor Signaling by Germline and Somatic Mutations in Prostate Cancer Jun Luo, PhD	
3:45 pm - 4:00 pm	Travel Award Presentation #3: SYNCRIP, A Molecular Brake on APOBEC-Driven Tumor Mutational Burden, Heterogeneity, and Therapy Resistance <i>Xiaoling Li, PhD</i>	
4:00 pm - 4:25 pm	Non-coding RNAs in Prostate Cancer Lineage Plasticity and Drug Resistance Michael Freeman, PhD	
4:25 pm - 4:50 pm	Emerging Biomarkers and Therapeutic Targets for Neuroendocrine Prostate Cancer Himisha Beltran, MD	
4:50 pm - 6:50 pm	Poster Session Robert Johnson Ballro	om



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### NOVEMBER 9-12, 2023 | SAN ANTONIO, TEXAS

SATURDAY, NOVEMBER 11, 2023 (All Times are in Central Time Zone)		
9:00 am - 11:10 am	Plenary Session 4: Stromal Microenvironment of Urological Moderators: Ping Mu, PhD and Christina Jamieson, PhD	Pathologies
9:00 am - 9:25 am	Impact of Bone Microenvironment on Prostate Cancer Dorma Resistance Xiaohong Li, PhD	ancy, Metastasis, and Therapeutic
9:25 am - 9:50 am	Bone Microenvironment Specific Metabolic Adaptations Drives Metastatic Prostate Cancer Subhamoy Dasgupta, PhD	
9:50 am - 10:05 am	Travel Award Presentation #4: A TBX2-Driven Signaling Switch from Androgen Receptor to Glucocorticoid Receptor Confers Enzalutamide Resistance in Prostate Cancer Sayanika Dutta, MSc	
10:05 am - 10:30 am	Exploring the Tumor Microenvironment in Bladder Cancer Me Hung-Ming Lam, PhD	etastasis
10:30 am - 10:55 am	Targeting Fibrosis in the Lower Urinary Tract for the Treatmen Will Ricke, PhD	t of BPH/LUTS
10:55 am - 11:10 am	Travel Award Presentation #5: Characterization of Prost Imbalance Samara Silver, BS	atic Foam Cells in Steroid Hormone
11:10 am - 12:10 pm	Dr. Leland W.K. Chung Mentorship Award "You Only Have to Look Out the Window – Reflections on Michael Freeman, PhD Former Mentee and Mentees: Rosalyn Adam, PhD, Lillian Pere	
12:10 pm - 1:10 pm	Lunch	
1:10 pm - 3:45 pm	Plenary Session 5: Immunoregulation in Urological Disease Moderators: Leigh Ellis, PhD and Yan Dong, PhD	S
1:10 pm - 1:35 pm	Immune Mechanisms Shape the Clonal Landscape During Early Progression of Prostate Cancer <i>Flaminia Talos, MD, PhD</i>	
1:35 pm - 2:00 pm	Persistent Inflammation as a Driving Force in BPH Pathogene Simon Hayward, PhD	sis
2:00 pm - 2:15 pm	Travel Award Presentation #6: Targeted Engineering ma Immunotherapy Response in Prostate Cancer Furong Hu	RNA 3UTR Length Enhances Jang, PhD
2:15 pm - 2:40 pm	The Immune System and the Testosterone Paradox in Prostat Sushant Kachhap, PhD	e Cancer
2:40 pm - 2:55 pm	Travel Award Presentation #7: Siglec-7/9 are Immune C a Ligand Specifically for Siglec-9 in Prostate Cancer Ru	
2:55 pm - 3:20 pm	Exploring the Acquired Molecular Mechanisms and Cell Biolo in Prostate Cancer Cells Nikki Delk, PhD	ogical Consequences of Chronic IL-1
3:20 pm - 3:45 pm	Immunoregulation of Bladder Cancer by Oncogene Activation William Kim, MD	
3:45 pm - 3:55 pm	Coffee Break	
3:55 pm - 4:25 pm	Awards Ceremony	
4:25 pm - 4:55 pm	SBUR Business Meeting	
4:55 pm - 6:55 pm	Poster Session	Robert Johnson Ballroom



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SUNDAY, NOVEMBER 12, 2023		
9:00 am -10:00 am	AUA Lectureship "Alternative Androgen-Independent Pathways for Prostatic Growth" Aria Olumi MD	
10:00 am - 12:20 pm	Plenary Session 6: Confounding Factors of Urological Pathologies Moderators: Natasha Kyprianou, PhD and Zhou Wang, PhD	
10:00 am - 10:25 am	Environmental Contaminants as Risk Factors for Lower Urinary Tract Symptoms Kimberly Stietz, PhD	
10:25 am - 10:50 am	Alternative Polyadenylation Transcriptome-wide Association Study (32aTWAS) Identifies Novel APA-linked Susceptibility Genes in Prostate Cancers <i>Wei Li, PhD</i>	
10:50 am - 11:05 am	Travel Award Presentation #8: Elevated miR-196a-2 and Novel HOXC Variant Gene Expression in Castration-Resistant Prostate Cancer Isaacson Adelani, PhD	
11:05 am - 11:15 am	Coffee Break	
11:15 am - 11:40 am	How Do We Detect Acute Kidney Injury (AKI) and Acute Bladder Injury (ABI)? Biomarkers and Covid Jonathan Barasch, PhD	
11:40 pm - 11:55 pm	Travel Award Presentation #9: Activation of Pparg in the Renal Urothelium Preserves Parenchyma during Urinary Tract Obstruction Mohammad Alhrakeh, PhD	
11:55 pm - 12:20 pm	Tumor Microenvironment Mediators of Racial Disparities in Prostate Carcinogenesis Omar Franco, MD, PhD	
12:20 pm	Closing Remarks Will Ricke, PhD, SBUR President	