

## Curriculum Vitae

### Irfan A. Asangani, Ph.D.

#### **A. Contact Information**

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#### **B. Education:**

- 2013-2015 Research Investigator, Under the mentorship of Dr. Arul Chinnaiyan - HHMI Investigator, Department of Pathology, Michigan Center for Translational Pathology, University of Michigan, Ann Arbor, MI
- 2009-2012 Post-Doctoral Research Fellow, Under the mentorship of Dr. Arul Chinnaiyan - HHMI Investigator, Department of Pathology, Michigan Center for Translational Pathology, University of Michigan, Ann Arbor, MI
- 2004-2009 Ph.D. Cancer Biology (*Summa cum laude*) - Klinikum Mannheim, DKFZ / Heidelberg University (Germany)
- 1999-2001 M.S. Biochemistry (First Class) - Madras University (India)
- 1996-1999 B.S. Biochemistry (First Class) - Madras University (India)

#### **C. Positions**

- 2023-present Associate Professor (Tenured), Department of Cancer Biology, University of Pennsylvania School of Medicine
- 2015-2023 Assistant Professor (Tenure Track), Department of Cancer Biology, University of Pennsylvania School of Medicine
- 2015-present Core Member, Penn Epigenetics Institute, University of Pennsylvania
- 2015-present Associate Investigator, Abramson Family Cancer Research Institute, University of Pennsylvania
- 2015-present Member, Abramson Cancer Center, University of Pennsylvania
- 2017-2020 Consultant, Zenith Epigenetics Ltd., Calgary, Canada
- 2014-2015 Consultant, Oncofusion Therapeutics Inc., Ann Arbor, Michigan
- 2002-2004 Research Assistant, Department of Biochemistry / MCBL / MRDG, Indian Institute of Science, Bangalore, India
- 2001-2002 Lecturer, Post-Graduate Molecular Biology, Islamiah College, Vaniyambadi, India.

#### **D. Selected Awards and Honors:**

- 2023-2026 Research Scholar Award, American Cancer Society
- 2021 SBUR Young Investigator Award, Society for Basic Urologic Research
- 2020-2022 Conquer Cancer Now Award, Concern Foundation
- 2020-2021 STL Cure Sarcoma Research Award, Sarcoma Foundation of America
- 2017 Breakthrough Bike Challenge - Cooper Scholar Award
- 2017 AFCRI Pilot Award for New Investigators, Abramson Family Cancer Research Institute, University of Pennsylvania
- 2014-2018 K99/R00 Pathway to Independence Award, NIH
- 2014 Best Poster Award, 7th Annual Prostate Cancer Program Retreat
- 2013 Millennium Scholar-In-Training Award, American Association for Cancer Research
- 2013 Young Investigator Award, Prostate Cancer Foundation
- 2013 Challenge Award, Prostate Cancer Foundation

- 2012 Best Poster Award, 5th Annual Prostate Cancer Program Retreat
- 2010 DAAD Travel Grant to attend the DKFZ Alumni Meeting, Klinikum Mannheim / DKFZ / Heidelberg University, Germany.
- 2008 Best Poster Award, 5th Colmar Scientific Symposium "The New RNA Frontiers". Colmar, France.
- 2007 Invited Young Researcher, Lindau Nobel Laureate Meeting, Lindau, Germany.
- 2007 Invited to represent DKFZ graduate students at Berlin-Summer School, Berlin, Germany
- 2006 Best Participant Award, Ambion/Applied biosystems/EMBL miRNA Workshop, Heidelberg, Germany.

### **E. Overview of the Asangani Lab**

**Research Interest:** Asangani lab focuses on the identification, characterization, and therapeutic targeting of epigenetic and transcriptional regulators in cancer.

**Research Areas:** Cancer Biology, Molecular Biology, Transcription, Signaling pathways, Drug Resistance, Drug Repurposing

#### **Research Projects:**

- 1) Epigenetic Vulnerabilities in Cancer: Identifying and targeting epigenetic vulnerabilities in naïve and therapy-resistant cancer.
- 2) Metabolite Availability and Epigenetic Landscapes: Investigating how metabolic pathways influences epigenetic regulation in cancer.
- 3) Chromatin Dysregulation and Immune Surveillance: Exploring the role of chromatin modifiers and transcriptional regulators in immune surveillance and tumor progression.
- 4) Development of PhosTACs: Designing and developing PhosTACs (phosphorylation-targeting chimeras) as novel cancer therapeutics.

#### **Five Representative/Highlighted Publications from Asangani Lab (Corresponding author):**

- 1) Parolia A, Eyunni S, Verma BK, Young E, Liu L, George J, Aras S, Das CK, Mannan R, Rasool RU, Luo J, Carson SE, Mitchell-Velasquez E, Liu Y, Xiao L, Gajjala PR, Jaber M, Wang X, He T, Qiao Y, Pang M, Zhang Y, Alhusayan M, Cao X, Tavana O, Hou C, Wang Z, Ding K, Chinnaiyan AM, **Asangani IA**: NSD2 is a requisite subunit of the AR/FOXA1 neo-enhanceosome in promoting prostate tumorigenesis. *Nature Genetics*. September 2024. PMID: PMC11525188

Summary: Through a targeted epigenetic regulator-focused functional CRISPR screen for AR coactivators, we identified an essential role for NSD2, a histone methyltransferase that catalyzes H3K36me<sub>2</sub>, in the formation of AR-associated neo-enhancers in PCa. Our mechanistic studies establish NSD2 as a critical component of these neo-enhancers and a novel therapeutic target for AR-dependent PCa

- 2) Rasool RU, O'Connor CM, Das CK, Alhusayan M, Verma BK, Islam S, Frohner IE, Deng Q, Mitchell-Velasquez E, Sangodkar J, Ahmed A, Linauer S, Mudrak I, Rainey J, Zawacki KP, Suhan TK, Callahan CG, Rebernick R, Natesan R, Siddiqui J, Sauter G, Thomas D, Wang S, Taylor DJ, Simon R, Cieslik M, Chinnaiyan AM, Busino L, Ogris E, Narla G, **Asangani IA**: Loss of LCMT1 and biased protein phosphatase 2A heterotrimerization drive prostate cancer progression and therapy resistance. *Nature Communications* August 2023. PMID: PMC10465527.

**Summary:** This work investigated the role of the serine-threonine protein phosphatase PP2A in reactivating AR-signaling in second-generation anti-androgen refractory CRPC. We identified a novel signaling axis connecting the PI3K-AKT-mTOR-S6K1 pathway to the PP2A activating enzyme LCMT1. Our data show that AR-addiction in enzalutamide refractory CRPC is driven by S6K1- and b-TrCP-mediated phosphorylation-induced degradation of LCMT1, resulting in decreased PP2A activity with a reciprocal increase in hyperphosphorylated, transcriptionally active MED1-AR complex. Additionally, we demonstrated the therapeutic efficacy of small molecule activator of phosphatase (PP2A) in refractory CRPC.

- 3) Rasool RU, Natesan R, Deng Q, Aras S, Lal P, Sander Efron S, Mitchell-Velasquez E, Posimo JM, Carskadon S, Baca SC, Pomerantz MM, Siddiqui J, Schwartz LE, Lee DJ, Palanisamy N, Narla G, Den RB, Freedman ML, Brady DC, **Asangani IA**: CDK7 inhibition suppresses castration-resistant prostate cancer through MED1 inactivation. **Cancer Discovery** 9(11): 1538-1555, November 2019. PMID: PMC7202356.

**Summary:** In our efforts to discover novel transcriptional vulnerabilities in CRPC, we used integrated mechanistic modeling to uncover a driver function for CDK7 in regulating AR-mediated transcription through direct phosphorylation of MED1 – a critical coactivator of AR. The mechanistic insights revealed CDK7 as a novel therapeutically targetable vulnerability in AR-addicted CRPC.

- 4) Pawar A, Gollavilli PN, Wang S, **Asangani IA**: Resistance to BET inhibitor leads to alternative therapeutic vulnerabilities in castration-resistant prostate cancer. **Cell Reports** 22(9): 2236-2245, February 2018. PMID: 29490263

**Summary:** Here, we studied acquired mechanisms of resistance to BETi in the context of prostate cancer. BETi-refractory cells, in the absence of gatekeeper mutations, show reduced chromatin occupancy by BRD4 and decreased sensitivity to BRD4 degraders/knockdown, due to BRD4-independent transcription program orchestrated by CDK9 and PRC2 activity. Our findings both revealed therapeutic limitations of BETi as monotherapy and, importantly, demonstrated that the BETi refractory cells with altered chromatin accessibility and transcriptional output display new targetable epigenetic dependencies.

- 5) Deng Q, Natesan R, Cidre-Aranaz F, Arif S, Liu Y, Rasool RU, Wang P, Mitchell-Velasquez E, Das CK, Vinca E, Cramer Z, Grohar PJ, Chou M, Kumar-Sinha C, Weber K, Eisinger-Mathason TSK, Grillet N, Grünwald T, **Asangani IA**: Oncofusion-driven de novo enhancer assembly promotes malignancy in Ewing sarcoma via aberrant expression of the stereociliary protein LOXHD1. **Cell Reports** 39(11): 110971, June 2022. PMID: PMC9716578.

**Summary:** By integrative analysis of thousands of pan-cancer transcriptomes, we identified a 32-gene signature that distinguishes EwS from pan-cancer. Among the genes within this signature that are directly regulated by EWSR1::FLI1 through de novo enhancer formation, we identified the stereociliary protein-encoding gene, LOXHD1, and demonstrated its role as a critical mediator of EWSR1::FLI1 and HIF1 $\alpha$  transcriptional programs. Our findings position LOXHD1 as a biomarker and driver of EwS metastasis, opening new possibilities for LOXHD1-targeted therapies. In an ongoing collaborative study, LOXHD1-targeting T-cell receptors (TCRs) have achieved complete EwS regression in mouse models.

## **F. Research Activities:**

**F1: Publications:** 65 articles total with over **14,800 citations** are listed below in chronologic order

[https://scholar.google.com/citations?user=q\\_Mc-iMAAAAJ](https://scholar.google.com/citations?user=q_Mc-iMAAAAJ)

- 1) Demetriadou C, Noji M, Good AL, Mitchell-Velasquez E, Venkatesh S, Kantner DS, Pennise J, Costa-Pinheiro P, Pinheiro LV, Harada T, Nguyen PTT, Chatoff A, Megill E, Crispim CVDS, Marcinkiewicz MM, Meier JL, Arany Z, **Asangani IA**, Furth EE, Stanger BZ, Snyder NW, Wellen KE: A nuclear branched-chain amino acid catabolism pathway controls histone propionylation in pancreatic cancer. **bioRxiv [Preprint]**. 2025 Apr 26:2025.04.23.650241. doi: 10.1101/2025.04.23.650241. PMID: PMC12191106
  - 2) Gladstein AC, Poltorack CD, Solomon AMC, Venkatesh S, Adler KM, Robertson MR, Stransky S, Irizarry-Negron VM, Ruiz DA, Freeburg NF, Sidoli S, **Asangani IA**, Shaffer SM, Feldser DM: The H3 K36M oncohistone inhibits NSD2 to activate a SETD2-dependent antiviral-like immune response in KRAS-driven lung cancer. **bioRxiv [Preprint]**. 2025 May 28:2025.05.25.655971. doi: 10.1101/2025.05.25.655971. PMID: PMC12154733
  - 3) Blanchard T, Faridi P, Xu C, Bear AS, Rasool RU, Huang G, Lim TCC, Ayala R, Gabunia K, Ji M, Posey AD Jr, Scholler J, **Asangani IA**, Purcell AW, Linette GP, June CH, Carreno BM. LOXHD1 is an oncofusion-regulated antigen of ewing sarcoma. **Sci Rep**. 2025 Apr 15;15(1):13007. doi: 10.1038/s41598-025-96877-9. PMID: PMC12000433
  - 4) Sussman JH, Cure HW, Yuan S, Ito K, **Asangani IA**, Garcia BA, Stanger BZ, Katsuda T: In vivo CRISPR screening reveals epigenetic regulators of hepatobiliary plasticity. **Genes Dev**. 2025 May 2;39(9-10):603-616. doi: 10.1101/gad.352420.124. PMID: PMC12047657
  - 5) Sussman JH, Cure HW, Li, J, Ito K, Yuan, S, Bhanu N, **Asangani IA**, Garcia BA, Stanger BZ, Katsuda T: In vivo CRISPR screening reveals epigenetic regulators of hepatobiliary plasticity. **Genes & Development**. 2025 May 2;39(9-10):603-616. doi: 10.1101/gad.352420.124. PMID: PMC1204765
  - 6) Schwab A, Siddiqui MA, Ramesh V, Gollavilli PN, Turtos MA, Møller SS, Pinna L, Havelund JF, Rømer AMA, Ersan PG, Parma B, Marschall S, Dettmer K, Alhusayan M, Bertoglio P, Querzoli G, Mielenz D, Sahin O, Færgeman NJ, **Asangani IA**, Ceppi P: Polyol pathway-generated fructose is indispensable for growth and survival of non-small cell lung cancer. **Cell Death & Differentiation**. December 2024.
  - 7) Parolia A, Eyunni S, Verma BK, Young E, Liu L, George J, Aras S, Das CK, Mannan R, Rasool RU, Luo J, Carson SE, Mitchell-Velasquez E, Liu Y, Xiao L, Gajjala PR, Jaber M, Wang X, He T, Qiao Y, Pang M, Zhang Y, Alhusayan M, Cao X, Taviana O, Hou C, Wang Z, Ding K, Chinnaiyan AM, **Asangani IA**: NSD2 is a requisite subunit of the AR/FOXA1 neo-enhanceosome in promoting prostate tumorigenesis. **Nature Genetics**. September 2024. PMID: PMC11525188
- Featured: News & Views.** Context-specific targeting of the androgen receptor in prostate cancer. Abate-Shen C. **Nature Genetics**. September 2024.
- 8) Katsuda T, Sussman JH, Ito K, Katznelson A, Yuan S, Takenaka N, Li J, Merrell AJ, Cure H, Li Q, Rasool RU, **Asangani IA**, Zaret KS, Stanger BZ.: Cellular reprogramming in vivo initiated by SOX4 pioneer factor activity. **Nature Communications**. February 2024 PMID: PMC10897393
  - 9) Rasool RU, O'Connor CM, Das CK, Alhusayan M, Verma BK, Islam S, Frohner IE, Deng Q, Mitchell-Velasquez E, Sangodkar J, Ahmed A, Linauer S, Mudrak I, Rainey J, Zawacki KP, Suhan TK, Callahan CG, Rebernick R, Natesan R, Siddiqui J, Sauter G, Thomas D, Wang S, Taylor DJ, Simon R, Cieslik M, Chinnaiyan AM, Busino L, Ogris E, Narla G, **Asangani IA**: Loss of LCMT1 and biased protein phosphatase 2A heterotrimerization drive prostate cancer progression and therapy resistance. **Nature Communications** August 2023. PMID: PMC1046527

- 10) Walter DM, Gladstein AC, Doerig KR, Natesan R, Baskaran SG, Gudiel AA, Adler KM, Acosta JO, Wallace DC, **Asangani IA**, Feldser DM: Setd2 inactivation sensitizes lung adenocarcinoma to inhibitors of oxidative respiration and mTORC1 signaling. **Communications Biology**. Page: 6(1):255. doi: 10.1038/s42003-023-04618-3. March 2023. PMID: PMC10006211
- 11) Deng Q, Natesan R, Cidre-Aranaz F, Arif S, Liu Y, Rasool RU, Wang P, Mitchell-Velasquez E, Das CK, Vinca E, Cramer Z, Grohar PJ, Chou M, Kumar-Sinha C, Weber K, Eisinger-Mathason TSK, Grillet N, Grünewald T, **Asangani IA**: Oncofusion-driven de novo enhancer assembly promotes malignancy in Ewing sarcoma via aberrant expression of the stereociliary protein LOXHD1. **Cell Reports**. 39(11): 110971, June 2022. PMID: PMC9716578
- 12) Gollavilli PN, Parma B, Siddiqui MA, Yang H, Ramesh V, Napoli F, Schwab A, Natesan R, **Asangani IA**, Brabletz T, Pilarsky C, Ceppi P: The role of miR-200b/c in balancing EMT and proliferation revealed by an activity reporter. **Oncogene**. 40(12): 2309-2322, March 2021. PMID: PMC7994202
- 13) Rasool RU, Natesan R, **Asangani IA**: Toppling the HAT to treat lethal prostate cancer. **Cancer Discovery** 11(5): 1011-1013, May 2021.
- 14) Deng Q, Rasool RU, Russell RM, Natsan R, **Asangani IA**: Targeting androgen regulation of TMPRSS2 and ACE2 as a therapeutic strategy to combat COVID-19. **iScience** 24(3): 102254, March 2021. PMID: PMC7919514
- 15) **Asangani IA**, Blair IA, Van Duyne G, Hilser VJ, Moiseenkova-Bell V, Plymate S, Sprenger C, Wand AJ, Penning TM: Using biochemistry and biophysics to extinguish androgen receptor signaling in prostate cancer. **Journal of Biological Chemistry** 296: 100240, January 2021. PMID: PMC7949100
- 16) Siddiqui MA, Gollavilli PN, Ramesh V, Parma B, Schwab A, Vazakidou ME, Natesan R, Saatci O, Rapa I, Bironzo P, Schuhwerk H, **Asangani IA**, Sahin O, Volante M, Ceppi P: Thymidylate synthase drives the phenotypes of epithelial-to-mesenchymal transition in non-small cell lung cancer. **British Journal of Cancer** 124(1): 281-289, January 2021. PMID: PMC7782507
- 17) Penning TM, **Asangani IA**, Sprenger C, Plymate S: Intracrine androgen biosynthesis and drug resistance. **Cancer Drug Resistance Page**: 3(4): 912-929, November 2020. PMID: PMC8992556.
- 18) Chen J, Harding SM, Natesan R, Tian L, Benci JL, Li W, Minn AJ, **Asangani IA**, Greenberg RA: Cell cycle checkpoints cooperate to suppress DNA- and RNA- associated molecular pattern recognition and anti-tumor immune responses. **Cell Reports** 32(9): 108080, September 2020. PMID: PMC7530826
- 19) Zhao SG, Chen WS, Li H, Foye A, Zhang M, Sjöström M, Aggarwal R, Playdle D, Liao A, Alumkal JJ, Das R, Chou J, Hua JT, Barnard TJ, Bailey AM, Chow ED, Perry MD, Dang HX, Yang R, Moussavi-Baygi R, Zhang L, Alshalalfa M, Laura Chang S, Houlahan KE, Shiah YJ, Beer TM, Thomas G, Chi KN, Gleave M, Zoubeidi A, Reiter RE, Rettig MB, Witte O, Yvonne Kim M, Fong L, Spratt DE, Morgan TM, Bose R, Huang FW, Li H, Chesner L, Shenoy T, Goodarzi H, **Asangani IA**, Sandhu S, Lang JM, Mahajan NP, Lara PN, Evans CP, Febbo P, Batzoglou S, Knudsen KE, He HH, Huang J, Zwart W, Costello JF, Luo J, Tomlins SA, Wyatt AW, Dehm SM, Ashworth A, Gilbert LA, Boutros PC, Farh K, Chinnaiyan AM, Maher CA, Small EJ, Quigley DA, Feng FY: DNA methylation landscapes in advanced prostate cancer. **Nature Genetics** 52(8): 778-789, August 2020. PMID: PMC7454228

- 20) Yuan S, Natesan R, Sanchez-Rivera FJ, Li J, Bhanu NV, Yamazoe T, Lin JH, Merrell AJ, Sela Y, Thomas SK, Jiang Y, Plesset JB, Miller EM, Shi J, Garcia BA, Lowe SW, **Asangani IA**, Stanger BZ: Global regulation of the histone mark H3K36me2 underlies epithelial plasticity and metastatic progression. **Cancer Discovery** 10(6): 854-871, June 2020. PMID: PMC7269857
- 21) Devalaraja S, To TKJ, Folkert IW, Natesan R, Alam MZ, Li M, Yuma Tada Y, Budagyan K, Dang MT, Zhai L, Lobel GP, Ciotti GE, Eisinger-Mathason TSK, **Asangani IA**, Weber K, Simon MC, Haldar M: Tumor-derived retinoic acid regulates intratumoral monocyte differentiation to promote immune suppression. **Cell**. 180(6): 1098-1114, March 2020. PMID: PMC7194250
- 22) Natesan R, Aras S, Efron SS, **Asangani IA**: Epigenetic regulation of chromatin in prostate cancer. **Advances in Experimental Medicine and Biology** 1219(1210): 379-401, January 2020.
- 23) Siddiqui A, Gollavilli PN, Schwab A, Vazakidou ME, Ersan PG, Ramakrishnan M, Pluim D, Coggins S, Saatci O, Annaratone L, Hm Schellens J, Kim B, **Asangani IA**, Rasheed SAK, Marchiò C, Sahin O, Ceppi P: Thymidylate synthase maintains the de-differentiated state of triple negative breast cancers. **Cell Death & Differentiation** 26(11): 2223-2236, November 2019. PMID: PMC6888897
- 24) Rasool RU, Natesan R, Deng Q, Aras S, Lal P, Sander Efron S, Mitchell-Velasquez E, Posimo JM, Carskadon S, Baca SC, Pomerantz MM, Siddiqui J, Schwartz LE, Lee DJ, Palanisamy N, Narla G, Den RB, Freedman ML, Brady DC, **Asangani IA**: CDK7 inhibition suppresses castration-resistant prostate cancer through MED1 inactivation. **Cancer Discovery** 9(11): 1538-1555, November 2019. PMID: PMC7202356.
- Featured: In the spotlight.** Androgen Receptor Interaction with Mediator Complex Is Enhanced in Castration-Resistant Prostate Cancer by CDK7 Phosphorylation of MED1 Russo WR, Nouri M, Balk SP. **Cancer Discovery**. November 2019.
- 25) Kregel S, Malik R, **Asangani IA**, Wilder-Romans K, Rajendiran T, Xiao L, Vo JN, Soni T, Cieslik M, Fernandez-Salas E, Zhou B, Cao X, Speers C, Wang S, Chinnaiyan AM.: Functional and mechanistic interrogation of BET bromodomain degraders for the treatment of metastatic castration-resistant prostate cancer. **Clinical Cancer Research** 25(13): 4038-4048, July 2019. PMID: PMC6606381
- 26) Gollavilli PN, Pawar A, Wang S, Wilder-Romans K, Natesan R, Engelke CG, Dommeti VL, Krishnamurthy PM, Nallasivam A, Apel IJ, Xu T, Qin ZS, Feng FY, **Asangani IA**: EWS/ETS-driven Ewing sarcoma requires BET bromodomain proteins. **Cancer Research** 78(16): 4760-4773, August 2018.
- 27) Chakravarthi BVSK, Chandrashekar DS, Agarwal S, Balasubramanya SAH, Pathi SS, Goswami MT, Jing X, Wang R, Mehra R, **Asangani IA**, Chinnaiyan AM, Manne U, Sonpavde G, Netto GJ, Gordetsky J, Varambally S: miR-34a regulates expression of the Stathmin-1 oncoprotein and prostate cancer progression. **Molecular Cancer Research** 16(7): 1125-1137, July 2018. PMID: PMC5897228.
- 28) Pawar A, Gollavilli PN, Wang S, **Asangani IA**: Resistance to BET inhibitor leads to alternative therapeutic vulnerabilities in castration-resistant prostate cancer. **Cell Reports** 22(9): 2236-2245, February 2018.
- 29) Stypulkowski E, **Asangani IA**, Witze E: The depalmitoylase APT1 directs the asymmetric partitioning of Notch and Wnt signaling during cell division. **Science Signaling** 11(511): eaam8705, January 2018. PMID: PMC5914505.

- 30) Wang X, Qiao Y, **Asangani IA**, Ateeq B, Poliakov A, Cieslik M, Pitchiaya S, Chakravarthi BV, Cao X, Jing X, Wang CX, Apel IJ, Wang R, Tien JC, Juckette KM, Yan W, Jiang H, Wang S, Varambally S, Chinnaiyan AM: Development of peptidomimetic inhibitors of the ERG gene fusion product in prostate cancer. **Cancer Cell** 31(4): 532-548, April 2017. PMID: PMC5443258
- 31) **Asangani IA**, Wilder-Romans K, Dommeti VL, Krishnamurthy PM, Apel IJ, Escara-Wilke J, Plymate SR, Navone NM, Wang S, Feng FY, Chinnaiyan AM: BET bromodomain inhibitors enhance efficacy and disrupt resistance to AR antagonists in the treatment of prostate cancer. **Molecular Cancer Research** 14(4): 324-331, April 2016. PMID: PMC4834259.

#### Before Joining UPenn (n = 34)

- 32) Mody RJ, Wu YM, Lonigro RJ, Cao X, Roychowdhury S, Vats P, Frank KM, Prensner JR, **Asangani I**, Palanisamy N, Dillman JR, Rabah RM, Kunju LP, Everett J, Raymond VM, Ning Y, Su F, Wang R, Stoffel EM, Innis JW, Roberts JS, Robertson PL, Yanik G, Chamdin A, Connelly JA, Choi S, Harris AC, Kitko C, Rao RJ, Levine JE, Castle VP, Hutchinson RJ, Talpaz M, Robinson DR, Chinnaiyan AM: Integrative clinical sequencing in the management of refractory or relapsed cancer in youth. **Journal of the American Medical Association** 314(9): 913-925, September 2015. PMID: PMC4758114.
- 33) Powell K, Semaan L, Conley-LaComb MK, **Asangani I**, Wu Y-M, Ginsburg KB, Williams J, Squire JA, Maddipati KR, Cher ML, Chinni SR: ERG/AKR1C3/AR constitutes a feed-forward loop for AR signaling in prostate cancer cells. **Clinical Cancer Research** 21(11): 2569-79, June 2015. PMID: PMC4976600.
- 34) Scanlon CS, Banerjee R, Inglehart RC, Liu M, Russo N, Hariharan A, van Tubergen EA, Corson SL, **Asangani IA**, Mistretta CM, Chinnaiyan AM, D'Silva NJ: Galanin modulates the neural niche to favour perineural invasion in head and neck cancer. **Nature Communications** 6: 6885, April 2015. PMID: PMC4476386.
- 35) Malik R, Khan AP, **Asangani IA**, Cieslik M, Prensner JR, Wang X, Iyer MK, Jiang X, Borkin D, Escara-Wilke J, Stender R, Wu Y-M, Niknafs YS, Jing Xi, Qiao Y, Palanisamy N, Kunju LP, Krishnamurthy PM, Yocum AK, Mellacheruvu D, Nesvizhskii AI, Cao X, Dhanasekaran SM, Feng FY, Grembecka J, Cierpicki T, Chinnaiyan AM: Targeting the MLL complex in castration-resistant prostate cancer. **Nature Medicine** 21(4): 344-352, April 2015. PMID: PMC4390530
- 36) Malik R, Patel L, Prensner JR, Shi Y, Iyer MK, Subramanian S, Carley A, Niknafs YS, Sahu A, Han S, Ma T, Liu M, **Asangani IA**, Jing X, Cao X, Dhanasekaran Saravana M, Robinson DR, Feng FY, Chinnaiyan AM: The lncRNA PCAT29 inhibits oncogenic phenotypes in prostate cancer. **Molecular Cancer Research** 12(8): 1081-1087, August 2014. PMID: PMC4135019
- 37) Alluri PG, **Asangani IA**, Chinnaiyan AM: BETs abet Tam-R in ER-positive breast cancer. **Cell Research** 24(8): 899-900, July 2014. PMID: PMC4123300
- 38) **Asangani IA**, Chinnaiyan AM: BETting on a new prostate cancer treatment. **Cell Cycle** 13(13): 2015-2016, June 2014. PMID: PMC4111688
- 39) **Asangani IA**, Dommeti VL, Wang X, Malik R, Cieslik M, Yang R, Escara-Wilke J, Wilder-Romans K, Dhanireddy S, Engelke C, Iyer MK, Jing X, Wu Y-M, Cao X, Qin ZS, Wang S, Feng FY, Chinnaiyan AM: Therapeutic targeting of BET bromodomain proteins in castration-resistant prostate cancer. **Nature** 510(7504): 278-82, June 2014. PMID: PMC4075966

- 40) Prensner JR, Sahu A, Iyer MK, Malik R, Chandler B, **Asangani IA**, Poliakov A, Vergara IA, Alshalalfa M, Jenkins RB, Davicioni E, Feng FY, Chinnaiyan AM: The lncRNAs PCGEM1 and PRNCR1 are not implicated in castration resistant prostate cancer. **Oncotarget** 5(6): 1434-8, March 2014. PMID: PMC4039221
- 41) Prensner JR, Iyer MK, Sahu A, **Asangani IA**, Cao Q, Patel L, Vergara IA, Davicioni E, Erho N, Ghadessi M, Jenkins RB, Triche TJ, Malik R, Bedenis R, McGregor N, Ma T, Chen W, Han S, Jing X, Cao X, Wang X, Chandler B, Yan W, Siddiqui J, Kunju LP, Dhanasekaran SM, Pienta KJ, Feng FY, Chinnaiyan AM: The long noncoding RNA SchLAP1 promotes aggressive prostate cancer and antagonizes the SWI/SNF complex. **Nature Genetics** 45(11): 1392-1398, November 2013. PMID: PMC3812362
- 42) Khan AP, Rajendiran TM, Ateeq B, **Asangani IA**, Athanikar JN, Yocum AK, Mehra R, Siddiqui J, Palapattu G, Wei JT, Michailidis G, Sreekumar A, Chinnaiyan AM: The role of sarcosine metabolism in prostate cancer progression. **Neoplasia** 15(5): 491-501, May 2013. PMID: PMC3638352
- 43) **Asangani IA**, Ateeq B, Cao Q, Dodson L, Pandhi M, Kunju LP, Mehra R, Lonigro RJ, Siddiqui J, Palanisamy N, Wu Y-M, Cao X, Kim JH, Zhao M, Qin ZS, Iyer MK, Maher CA, Kumar-Sinha C, Varambally S, Chinnaiyan AM: Characterization of the EZH2-MMSET histone methyltransferase regulatory axis in cancer. **Molecular Cell** 49(1): 80-93, January 2013. PMID: PMC3547524
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- 49) Robinson DR, Kalyana-Sundaram S, Wu Y-M, Shankar S, Cao X, Ateeq B, **Asangani IA**, Iyer M, Maher CA, Grasso CS, Lonigro RJ, Quist M, Siddiqui J, Mehra R, Jing X, Giordano TJ, Sabel MS, Kleer CG, Palanisamy N, Natrajan R, Lambros MB, Reis-Filho JS, Kumar-Sinha C, Chinnaiyan AM: Functionally recurrent rearrangements of the MAST kinase and Notch gene families in breast cancer. **Nature Medicine** 17(12): 1646-1651, December 2011. PMID: PMC3233654

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- 52) Wang X-S, Shankar S, Dhanasekaran SM, Ateeq B, Sasaki AT, Jing X, Robinson D, Cao Q, Prensner JR, Yocum AK, Wang R, Fries DF, Han B, **Asangani IA**, Cao X, Li Y, Omenn GS, Pflueger D, Gopalan A, Reuter VE, Kahoud ER, Cantley LC, Rubin MA, Palanisamy N, Varambally S, Chinnaiyan AM: Characterization of KRAS rearrangements in metastatic prostate cancer. **Cancer Discovery** 1(1): 35-43, June 2011. PMCID: PMC3227139
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- 62) Leupold JH, Yang H-S, Colburn NH, **Asangani I**, Post S, Allgayer H: Tumor suppressor Pcd4 inhibits invasion/intravasation and regulates urokinase receptor (u-PAR) gene expression via Sp-transcription factors. *Oncogene* 26(31): 4550-4562, July 2007. PMID: 17297470
- 63) Leupold JH, **Asangani I**, Maurer GD, Lengyel E, Post S, Allgayer H: Src induces urokinase receptor gene expression and invasion/intravasation via activator protein-1/p-c-Jun in colorectal cancer. *Molecular Cancer Research* 5(5): 485-496, May 2007. PMID: 17510314
- 64) Wang H, Yan C, **Asangani I**, Allgayer H, Boyd DD: Identification of an histone H3 acetylated/K4-methylated-bound intragenic enhancer regulatory for urokinase receptor expression. *Oncogene* 26(14): 2058-2070, March 2007. PMID: 17001307
- 65) Schewe DM, Biller T, Maurer G, **Asangani IA**, Leupold JH, Lengyel ER, Post S, Allgayer H: Combination analysis of activator protein-1 family members, Sp1 and an activator protein-2alpha-related factor binding to different regions of the urokinase receptor gene in resected colorectal cancers. *Clinical Cancer Research* 11(24 Pt 1): 8538-8548, December 2005. PMID: 16361535

## **F2. Patents:**

- 1) The Trustees of the University of Pennsylvania: COMPOSITIONS AND METHODS FOR TARGETING LOXHD1-ASSOCIATED DISEASE. USA Patent Number US Provisional application (63/516,178), 2024.  
Inventors: Carreno, Linette, Blanchard, **Asangani**
- 2) Treatment of Cancer with CDK Inhibitors. The Trustees of the University of Pennsylvania: USA Patent Number Provisional Patent App PCT/US20/29883, 2020.  
Inventors: **Asangani**
- 3) 9H-pyrimido [4,5-b] indoles and related analogs as BET bromodomain inhibitors. The Regents of the University of Michigan: USA Patent Number 10253044, 2019.  
Inventors: Wang, Zhao, Zhou, Aguliar, Liu, Bai, McEachern, Sun, Wen, Luo, Zhao, Chinnaiyan, **Asangani**, Stuckey, Meagher, Ran, Hu
- 4) BET bromodomain inhibitors for treating prostate cancer and breast cancer. USA Patent Number Provisional Patent App 61/946,501, 2014.  
Inventors: Wang, Ran, Zhao, Yang, Liu, Bai, McEachern, Stuckey, Meagher, Sun, Li, Zhou, Karatas, Luo, Chinnaiyan, **Asangani**
- 5) BET bromodomain inhibitors and therapeutic methods using the same. The Regents of the University of Michigan: USA Patent Number WO2014164596 A1, 2014.  
Inventors: Wang, Ran, Zhao, Yang, Liu, Bai, McEachern, Stuckey, Meagher, Sun, Li, Zhou, Karatas, Luo, Chinnaiyan, **Asangani**
- 6) Compositions and methods for inhibiting MMSET. The Regents of the University of Michigan: USA Patent Number 8,697,407 B2, 2014.  
Inventors: Chinnaiyan, Varambally, Cao, **Asangani**

**F3. Funding:** (Total cost over \$10.0 million as a Principal Investigator)**F3.1 Ongoing Research Support:**

- 1) NIH-NCI, R01CA299870-01 03/2025-02/2030  
Towards characterization of Epigenetic targets in Prostate Cancer  
Role: **Principal Investigator**
- 2) NIH-NCI, R01CA249210-02 04/2020-03/2026  
Role of MED1 in the AR-dependent transcription in advanced prostate cancer,  
Role: **Principal Investigator**
- 3) NIH-NIDDK, 1R01CA292937-01A1 04/2025-03/2030  
Metabolic compartmentalization and the regulation of histone propionylation.  
(Katherin Wellen; Nathaniel Snyder, PI),  
Role: **Co-Investigator**
- 4) Abramson Cancer Center, Pilot Research Award 02/2025-11/2025  
Leveraging Targeted Genome Instability to Transform Immune-Cold Prostate Cancer  
into an Immune-Responsive State  
Role: **Principal Investigator**
- 5) NIH-NCI, 1R01CA266645-01A1 04/2023-03/2026  
Effect of DNA repeat silencing on efficacy of ATRi in prostate cancer treatment,  
(Eric J Brown, PI),  
Role: **Co-Investigator**
- 6) NIH/NIDDK, R01 08/2023-07/2026  
Role of glutamine metabolism in Dendritic Cell Development,  
(Malay Haldar, PI),  
Role: **Co-Investigator**
- 7) American Cancer Society, Research Scholar Award 01/2023-12/2026  
Oncofusion triggered opportunistic de novo enhancer assembly activates novel  
therapeutic targets in Ewing Sarcoma,  
Role: **Principal Investigator**
- 8) BASSER Center for BRCA 2023 grant, BASSER Center 06/2023-12/2025  
Role: **Principal Investigator**
- 9) BASSER Center for BRCA 2024 grant, BASSER center 07/2024-06/2026  
(Eric J Brown, PI),  
Role: **Co-Principal Investigator**
- 10) Ewing Sarcoma, Sarcoma Program, Abramson Cancer Center 07/2023-12/2025  
Role: **Principal Investigator**

**F3.2 Pending:**

- 1) NIH-NCI, A1 R01. The role of NNMT in prostate cancer. Application submitted November 2024 Direct cost \$350k/annual. A1 application reviewed in May 2025 [scored 6 percentiles](#).  
Role: **Principal Investigator**

**F3.3 Completed Research Support:**

- 1) NIH-NCI, R21CA274009 07/2023-06/2025  
Discovery and characterization of exceptionally specific surface oncoprotein LIPI in Ewing Sarcoma  
Role: **Principal Investigator**
- 2) DOD Idea Expansion, W81XWH-21-1-0436 07/2021-06/2025  
PP2A activation as a therapy for AR addicted refractory castration-resistant prostate cancer  
Role: **Principal Investigator**
- 3) AFCRI Pilot Award 06/2021-05/2022  
Repeat transcriptional deregulation combined with ATRi as a treatment for prostate cancer (Asangani, Wellen, Marmorstein, PI),  
Role: **Principal Investigator**
- 4) Carrick Therapeutics, UK (Scientific Research Agreement) 10/2020-06/2022  
Evaluating the efficacy of CDK7 inhibitor CT7001 in clinically relevant CRPC models  
Role: **Principal Investigator**
- 5) Conquer Cancer Now Award, Concern Foundation 10/2020-09/2022  
Role: **Principal Investigator**
- 6) Sarcoma Foundation of America Award, 07/2020-06/2021  
EWS-FLI1 triggered opportunistic de novo enhancer assembly activates potential cellular therapy targets in Ewing Sarcoma  
Role: **Principal Investigator**
- 7) AstraZeneca, Research Award 06/2020-05/2022  
Role of NSD2 in mediating AR signaling in metastatic prostate cancer,  
Role: **Principal Investigator**
- 8) Epigene Therapeutics Inc, (Scientific Research Agreement) 02/2019-02/2020  
Identifying mechanisms of action of CBP/P300- BET bromodomain dual inhibitor on AR signaling in enzalutamide-resistant prostate cancer,  
Role: **Principal Investigator**
- 9) Epigenetics Pilot Project, Penn Epigenetics Institute 01/2019-01/2020  
High throughput screening of FDA approved drugs with EZH2 inhibitor in prostate cancer cells.  
Role: **Principal Investigator**
- 10) Abramson Family Cancer Research (AFCRI) Pilot Award 12/2018-05/2019  
(Asangani, Busino, Co-PIs),  
Role: **Co-Principal Investigator**
- 11) Ewing Sarcoma donor gift, Family of Kim Hayman 11/2018-06/2019  
Role: **Principal Investigator**
- 12) Abramson Cancer Center Pilot Award - Romano Gift. 11/2017-05/2018  
Investigating the molecular mechanisms of acquired resistance to BET bromodomain inhibitors in castration-resistant prostate cancer.  
Role: **Principal Investigator**
- 13) Department of Defense, W81XWH-17-1-0404 08/2017-07/2020

Investigating the molecular mechanisms of acquired resistance to BET bromodomain inhibitors in castration-resistant prostate cancer  
 Role: **Principal Investigator**

- 14) Research Award, BASSER Center for BRCA 07/2017-06/2018  
 Role: **Principal Investigator**
- 15) Zenith Epigenetics (Scientific Research Agreement) 04/2017-04/2019  
 Role: **Principal Investigator**
- 16) Breakthrough Bike Challenge - Cooper Scholar Award 01/2017-12/2017  
 Role: **Principal Investigator**
- 17) Epigenetics Institute Award, Penn Epigenetics Institute 01/2017-12/2017  
 High throughput screening of FDA approved drugs with EZH2 inhibitor in prostate cancer cells.  
 Role: **Principal Investigator**
- 18) National Cancer Institute/NIH, 5R00-CA187664 10/2015-09/2018  
 Characterization of Epigenetic Targets in Prostate Cancer  
 Role: **Principal Investigator**
- 19) National Cancer Institute/NIH, 1K99CA187664-01 08/2014-09/2015  
 Characterization of Epigenetic Targets in Prostate Cancer  
 Role: **Principal Investigator**
- 20) Prostate Cancer Foundation Challenge Award 08/2013-8/2016  
 Therapeutic targeting of BET bromodomain proteins in castration-resistant prostate cancer (Chinnaiyan, PI)  
 Role: **Key Co-Investigator**
- 21) Prostate Cancer Foundation, Young Investigator Award 05/2013-05/2016  
 Characterization and therapeutic targeting of MMSET in prostate cancer  
 Role: **Principal Investigator**

#### **F4. Lectures by Invitation:**

- Nov 2025 Invited Speaker, EpiCypher 2025: Biological and Clinical Frontiers in Epigenetics Conference, Cancu, Mexico
- Apr 2025 Featured Speaker, Center for Prostate Disease Research (CPDR) Scientific Retreat, Bethesda, Maryland
- Apr 2025 Invited Speaker, BASSER Annual Symposium, Philadelphia, PA
- Mar 2025 Invited Speaker, ACC Mini Symposium, UPenn, Philadelphia, PA
- Feb 2025 Invited Seminar Speaker, Biochemistry and Molecular Biology Department, Drexel University College of Medicine, Philadelphia, PA
- Jan 2025 Invited Seminar Speaker, O'Neal Cancer Center Seminar Series, University of Alabama.
- Oct 2024 Invited Speaker, TMCS 2024 - International Conference on Tumor Microenvironment and Cellular Stress - Paphos, Cyprus
- Aug 2024 Seminar Talk, Basser Center for BRCA Noon Conference, Philadelphia, PA
- Mar 2024 Speaker, 2024 Epigenetics Institute Rising Stars Symposium, University of Pennsylvania
- Feb 2024 Invited Speaker, Genome Regulation through RNA Conference, Cancun, Mexico

- Dec 2023 Seminar Speaker, Department of Experimental Therapeutics, MD Anderson Cancer Center, Houston TX
- Sep 2023 9th International Conference on Tumor Microenvironment and Cellular Stress, The Aegean Conferences, Kalamata, Greece.
- Aug 2023 Seminar Talk, Department of Biochemistry and Molecular Biology, University of Southern Denmark.
- Jul 2023 Seminar Talk, Tata Institute of Fundamental Research, Hyderabad. India
- Jul 2023 Seminar Talk, Department of Microbiology and Cell Biology, Indian Institute of Science, Bangalore, India.
- Mar 2023 AACR Special Conference on Advances in Prostate Cancer Research, Denver, Colorado.
- Mar 2023 Keystone Symposia- Epigenetics, Chromatin, Development and Disease. Victoria, British Columbia, Canada.
- Dec 2022 Invited Lecture, Center of Excellence for Prostate Cancer at the Tisch Cancer Institute, Mount Sinai Health System, New York.
- Sep 2022 Seminar Speaker Biochemistry and Molecular Biology Department, Mayo Clinic, Rochester, MN
- Jul 2022 Sarcoma Biology Virtual club meeting. German Cancer Research Center (DKFZ), Heidelberg, Germany
- Jul 2022 Weill Cornell Medicine SPORE in Prostate cancer - Guest speaker. New York, NY
- May 2022 10th Clinical Translation of Epigenetics in Cancer Therapy, Hotel Sonesta, Philadelphia.
- Jan 2022 Cancer and Stem Cell (CSCB) Seminar Series at Duke-NUS Medical School, Singapore
- Dec 2021 Invited Lecture, Islamiah College (Autonomous). Tamil Nadu, India
- Nov 2021 Society for Basic Urology Research (SBUR) Annual Meeting, Orlando, FL
- Nov 2021 EpiCypher 2021: Biological and Clinical Frontiers in Epigenetics Conference, Tampa, FL
- Mar 2021 Topics in Cancer Seminar Series, The University of Florida Health Cancer Center, Gainesville, FL
- Feb 2021 Eppley Institute for Research in Cancer and Allied Diseases Seminar Series, University of Nebraska, Omaha, NE
- Jul 2020 "Therapeutic targeting of TMPRSS2 and ACE2 as a potential strategy to combat COVID-19," AACR Virtual Meeting: COVID-19 and Cancer
- Dec 2019 Prostate Cancer Foundation (PCF) Webinar
- Sep 2019 Seminar Talk, Bassett Center for BRCA Noon Conference, Philadelphia, PA
- May 2018 "Epigenetic Vulnerabilities in Castration-Resistant Prostate Cancer," Prostate Cancer Working Group Meeting, Sidney Kimmel Cancer Centers at Thomas Jefferson University, Philadelphia, PA
- Jun 2017 4th Annual Sidney Kimmel Cancer Centers' Prostate Cancer Amtrak Alliance Summit, Thomas Jefferson University, Philadelphia, PA
- Oct 2016 "Novel Epigenetic Approach Targeting Nuclear Receptors in Prostate Cancer," The 7th Biennial Great Lakes Nuclear Receptor Conference (GLNRC). Case Western Reserve University, Cleveland, OH
- Sep 2016 "BET Bromodomain Inhibitors in Prostate Cancer," 11th Annual Discovery on Target, Cambridge Healthtech Institute, Boston, MA
- Apr 2016 "Bromodomain Inhibitors in Cancer," Third Annual Symposium, Wake Forest University, Winston-Salem, NC
- Dec 2015 Guest Lecturer, Department of Microbiology and Cell Biology, Indian Institute of Science, Bangalore, India
- Mar 2015 "Characterization and Therapeutic Targeting of Epigenetic Regulators in Cancer," Department of Cancer Biology, University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

- Mar 2015 "BET Bromodomain Inhibitors Overcome Enzalutamide Resistance in Castration Resistant Prostate Cancer," 8th Annual Prostate Cancer Program Retreat. Fort Lauderdale, FL
- Oct 2014 "Targeting BET Bromodomain Proteins in Castration-Resistant Prostate Cancer," Discovery on Target, Cambridge Healthtech Institute, Boston, MA
- Oct 2014 "Betting on BETs for Advanced Prostate Cancer Treatment," 21st Prostate Cancer Foundation Retreat, Carlsbad, CA
- May 2014 "Betting on BETs for Prostate Cancer Treatment," Medivation Inc., San Francisco, CA
- Mar 2014 "Therapeutic Targeting of BET Bromodomain Proteins in Castration-Resistant Prostate Cancer," 7th Annual Prostate Cancer Program Retreat, Fort Lauderdale, FL
- Sep 2013 "Targeting the Histone Methyltransferase MMSET in Cancer," Discovery on Target, Cambridge Healthtech Institute, Boston, MA
- Nov 2012 "How to Use ENCODE Analysis Results," MCTP 2012 Think-Tank Summit on ENCODE, University of Michigan, Ann Arbor, MI
- Mar 2012 "Characterization of EZH2-MMSET Histone Methyltransferase Regulatory Axis in Cancer," 5th Annual Prostate Cancer Program Retreat, Fort Lauderdale, FL
- Apr 2007 Berlin-Summer School meeting of Helmholtz graduate students, Berlin, Germany
- Nov 2007 "MicroRNA-21 (miR-21) Post-Transcriptionally Downregulates Tumor Suppressor Pcd4 and Stimulates Invasion, Intravasation and Metastasis in Colorectal Cancer," 5th Colmar Scientific Symposium "The New RNA Frontiers," Colmar, France

**F5. Memberships in Professional and Scientific Societies and Other Professional Activities:**

*International:*

2020-present Ad hoc Reviewer, Swiss National Science Foundation

*National:*

- 2021-present Ad hoc Reviewer, National Institutes of Health (NCI CAMP, GRIC, SEP)
- 2018-present Reviewer, CDMRP Prostate Cancer Research Program Grant Review Panel
- 2013-present Reviewer, Prostate Cancer Foundation Challenge Award and Young Investigator Award
- 2021-present Member, American Urological Association
- 2020-present Member, The Society for Basic Urologic Research
- 2012-present Member, American Association for Cancer Research

**F6. Editorial Positions:**

- 2009-Present Reviewer for *Nature*, *Nature Genetics*, *Nature Cancer*, *Cancer Discovery*, *Nature Communications*, *Science Advances*, *JCI*, *Nature Drug Discovery*, *Elife*, *European Urology*, *Epigenetics & Chromatin*, *Cancer*, *Prostate*, *Cell Reports*, *Epigenetics & Chromatin*, *Cancer Research*, *Clinical Cancer Research*, *Molecular Cancer Research*, *Journal of Experimental Medicine*, *BMC Genomics*, *BMC Cancer*, *Oncogene*, *British Journal of Cancer*, *Neoplasia*, *International Journal of Cancer*.
- 2014 Guest Editor, *BioMed Research International*

**F7. Academic and Institutional Committees:**

- 2024-Present ACC Community Outreach and Engagement (COE) - Liaison
- 2024-present Prelim Advising Committee, Cell and Molecular Biology (CAMB - Cancer Biology) Program, Perelman School of Medicine, University of Pennsylvania
- 2024-present Prelim Committee Chair, Cell and Molecular Biology (CAMB - Cancer Biology) Program, Perelman School of Medicine, University of Pennsylvania

- 2023-present Diversity Search Adviser, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania.
- 2021-present Search Committee Co-Chair, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2017-present Committee Member, Cancer Biology Student Advising Committee, Perelman School of Medicine, University of Pennsylvania
- 2017-present Admissions Committee Member, Cell and Molecular Biology (CAMB - Cancer Biology) Program, Perelman School of Medicine, University of Pennsylvania
- 2015-present Search Committee Member, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2023-present Thesis Committee Member for Amy Gladstein, Cancer Biology Graduate Group, Perelman School of Medicine, University of Pennsylvania
- 2023-present Thesis Committee Member for Hamza Turkistani, Department of Cancer Biology, Bioengineering Graduate Group, School of Engineering and Applied Sciences, University of Pennsylvania.
- 2021 Prelim Committee Member: Valerie M. Irizarry-Negrón, Adam Ferrari, Perelman School of Medicine at the University of
- 2021-2023 Thesis Committee Member for Benjamin Caiello, Cancer Biology Graduate Group, Perelman School of Medicine, University of Pennsylvania
- 2019 Prelim Committee Member: Zvi Cramer, Shaun Egolf, Perelman School of Medicine at the University of Pennsylvania.
- 2019-2023 Thesis Committee Member for Nelson Freeburg, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2019-2023 Thesis Committee Member for Zvi Cramer, Cancer Biology Graduate Group, Perelman School of Medicine, University of Pennsylvania
- 2018 Prelim Committee Member: Mark Gerelus, Jason Godfrey, Perelman School of Medicine at the University of Pennsylvania.
- 2018-2023 Thesis Committee Member for Jonuelle Acosta, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2018-2021 Thesis Committee Member for Yekaterina Kori, Biochemistry and Molecular Biophysics Graduate Group, Perelman School of Medicine, University of Pennsylvania
- 2018-2023 Thesis Committee Member for Grant Grothusen, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2017 Prelim Committee Member, Perelman School of Medicine at the University of Pennsylvania
- 2017-2022 Seminar Committee Member, Abramson Family Cancer Research Institute, Perelman School of Medicine, University of Pennsylvania
- 2017-2020 Thesis Committee Member for Dylan Marchione, Department of Pharmacology, Perelman School of Medicine, University of Pennsylvania.
- 2017-2021 Thesis Committee Member for Qiaosi Tang, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2017-2020 Thesis Committee Member for Michael Werner, Department of Immunology, Perelman School of Medicine, University of Pennsylvania
- 2017-2020 Thesis Committee Member for Salina Yuan, MD-PhD, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2017-2020 Thesis Committee Member for David Walter, Cell and Molecular Biology - Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2012-2015 Participating Member, Precision Medicine Sequencing Tumor Board, MI-Oncoseq, Michigan Center for Translational Pathology (MCTP), University of Michigan
- 2012-2015 Search Committee Member, Michigan Center for Translational Pathology (MCTP), University of Michigan

**F8. Major Academic and Clinical Teaching Responsibilities:**

- 2024-present Lecturer, Cancer Biology MS1, Medical Graduate lectures, Perelman School of Medicine, University of Pennsylvania
- 2022-Present Faculty Course Co-Director CAMB5300: The Cell Cycle, Genome Integrity and Cancer, University of Pennsylvania
- 2017-2019 Faculty Course Co-Director CAMB5300: The Cell Cycle, Genome Integrity and Cancer, University of Pennsylvania
- 2020-present Lecturer CAMB 512: Cancer Biology and Genetics, University of Pennsylvania
- 2019-present Lecturer BMB 585, Wistar Inst Cancer Biology Course, The Wistar Institute
- 2024 Penn PREP scholar Mentor for Betzaida Cruz, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2021 Undergraduate Student Mentor for Rachael Ziskind, Smith College, Northampton, MA
- 2019 Monthly Seminar (October), Penn Epigenetics Institute, Perelman School of Medicine, University of Pennsylvania
- 2016 Faculty Course Co-Director CAMB 512: Cancer Biology and Genetics, University of Pennsylvania

**Direct Mentoring****Postdocs and Research Associates:**

- 2024-present Postdoctoral Fellow Mentor for Hyein Cho, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2024-present Postdoctoral Fellow Mentor for Ikram Ullah, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2021-present Postdoctoral Fellow Mentor for Brijesh Kumar Verma, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2020-present Postdoctoral Fellow Mentor for Chandan Kanta Das, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2018-2023 Postdoctoral Fellow Mentor for Reyaz ur Rasool, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2017-2023 Postdoctoral Fellow Mentor for Qu Deng, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2021-2022 Postdoctoral Fellow Mentor for Shahreen Tina Amin, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2018-2021 Postdoctoral Fellow Mentor for Shweta Aras, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2018-2020 Research Associate Mentor for Ram Natesan, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania
- 2016-2018 Postdoctoral Fellow Mentor for Paradesi Gollavilli, Department of Cancer Biology, Perelman School of Medicine, University of Pennsylvania

**Graduate Students:**

- 2024-present Graduate Student Mentor for Mohammed Alhusayan, Bioengineering Graduate Group, University of Pennsylvania
- 2023-present Graduate Student Mentor for Sharan Venkatesh, Bioengineering Graduate Group, University of Pennsylvania
- 2023-present Graduate Student Mentor for Alexis Jean Morales, Cell and Molecular Biology Graduate Group, University of Pennsylvania
- 2020-present Graduate Student Mentor for Erick Mitchell-Velasquez, Cancer Biology Graduate Group, University of Pennsylvania
- 2023 Graduate Student Rotation Mentor for Alexis Jean Morales, Cell and Molecular Biology Graduate Group, University of Pennsylvania
- 2018-2019 Graduate Student Mentor for Sam Sander Efron, Cancer Biology Graduate Group, University of Pennsylvania

- 2017-2018 Graduate Student Mentor for Aryel Heller, Cell and Molecular Biology Graduate Group, University of Pennsylvania
- 2018 Graduate Student Rotation Mentor for Natalie Toothacre, Cell and Molecular Biology Graduate Group, University of Pennsylvania
- 2016-2017 Graduate Student Rotation Mentor for Osvaldo Rivera, Cell and Molecular Biology Graduate Group, University of Pennsylvania
- 2017 Graduate Student Rotation Mentor for Zvi Cramer, Cell and Molecular Biology Graduate Group, University of Pennsylvania

**Masters/Undergraduate/High School Seniors:**

- 2023-2024 Masters Student Mentor for Xiaoyan Wang, University of Pennsylvania
- 2023-2024 Undergraduate Mentor for Gabriel Raytsis, University of Pennsylvania
- 2022-2023 Masters Student Mentor for Sharan Ventakesh, University of Pennsylvania
- 2021-2022 High School Student Mentor for Mridula Shanker, Great Valley High School - GVHS, Malvern, PA
- 2020-2021 Masters Student Mentor for Mohammed Alhusayan, Drexel University
- 2018 High School Student Mentor for Shehbeel Arif, Central High School, Philadelphia.
- 2017 Undergraduate Student Mentor for Ashish Dahal, University of Pennsylvania
- 2017 Undergraduate Student Mentor for Alyson Marshall, Cabrini University, Radnor, PA
- 2017 High School Student Mentor for Sidhant Nair, Downingtown STEM Academy - IB World School, Downingtown, PA
- 2016-2017 Undergraduate Student Mentor for Yasmina al Ghadban, School of Engineering and Science, University of Pennsylvania
- 2016 High School Student Mentor for Nora-Lovette Okwara, Neshaminy High School, Neshaminy, PA
- 2016 Undergraduate Student Mentor for Akash Halagur, Center for Neuroscience & Society, University of Pennsylvania
- 2014-2015 Undergraduate Student Mentor for Archana Nallasivam, Undergraduate Research Opportunity Program (UROP), University of Michigan
- 2009-2015 Lecturer, Michigan Center for Translational Pathology Summer Students Seminar Series, University of Michigan
- 2012-2015 Supervisor for Lakshmi Dommetti, MSc, Pranithi MK, MSc, Ingrid Apel, MS, Cancer Epigenetics Team, Michigan Center for Translational Pathology (MCTP), University of Michigan
- 2013-2014 Undergraduate Student Mentor for Manaasa Redd, Undergraduate Research Opportunity Program (UROP), University of Michigan
- 2013-2014 Undergraduate Student Mentor for Samir Mehreb, Undergraduate Research Opportunity Program (UROP), University of Michigan
- 2012-2013 M.D./Ph.D. Fellow Mentor for Carl Engelke, University of Michigan
- 2012-2013 Undergraduate Student Mentor for Ali Mazhar, Undergraduate Research Opportunity Program (UROP), University of Michigan
- 2011-2012 M.D. Fellow Mentor for Paul Harms, University of Michigan
- 2010-2011 Undergraduate Student Mentor for Vishal Somney, Undergraduate Research Opportunity Program (UROP), University of Michigan
- 2009-2012 Undergraduate Student Mentor for Lois Dodson, Undergraduate Research Opportunity Program (UROP), University of Michigan
- 2009-2010 Undergraduate Student Mentor for Akhil Kher, Undergraduate Research Opportunity Program (UROP), University of Michigan