

## CURRICULUM VITAE      Preethi H. Gunaratne, Ph.D.

**Title:** Moores Professor,  
Department of Biology & Biochemistry  
Director, UH-Gen Sequencing & Gene Editing Core  
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**Citizenship:** USA

**Education:** 1987 Ph.D. in Genetics & Development, Cornell University, Ithaca, New York  
Thesis Advisor: Michael Goldberg.  
Thesis: 'Transcriptional analysis of the *Zeste* locus in *Drosophila melanogaster*'.  
1999 Board Certification in Clinical Molecular Genetics  
Board Certification in Medical Genetics, American College of Medical Genetics.  
1982 B.Sc. *magna cum laude* in Zoology (Honors) Chemistry (Minor)  
University of Colombo, Sri Lanka

### Awards & Gifts:

2019 John & Rebecca Moores Professorship  
2014/2012 McNair Foundation Award  
2011 Virginia & L. E. Simmons Family Foundation Award  
(Joint Award with Jason Shohet and Xiabo Zhou)  
2011 Cullen Foundation Award  
2010 Baylor Partnership Fund Raising Featured Beneficiary Award  
(Joint Award with Matthew Anderson and Martin Matzuk)  
1989 Leukemia Research Foundation Fellowship Award  
1988 Northwestern Memorial Galter Fellowship Award  
1986 Amoco Research Award, Chicago  
1982 Graduate Fellowship, Cornell University  
1981 Best Graduating Senior in Zoology, University of Colombo

### Positions:

2019-Present Moores Professor, Biology & Biochemistry, University of Houston  
2018 Professor, Biology & Biochemistry, University of Houston  
2015-Present Director, UH-Sequencing & Gene Editing Core  
2012-2017 Associate Professor, Biology & Biochemistry, University of Houston  
2005-2012 Assistant Professor (Tenure-track), Biology & Biochemistry, University of Houston  
2002-2004 Assistant Professor (Non-Tenure track), Department of Pathology, Human Genome sequencing Center, Baylor College of Medicine, Houston, TX  
2001-2004 Director, cDNA Sequencing  
Human Genome Sequencing Center (HGSC), Baylor College of Medicine  
1999-2000 Research Associate, HGSC, Baylor College of Medicine  
1998-1999 Assistant Director Baylor DNA Diagnostic Laboratory, Baylor College of Medicine, Houston  
1996-1998 Clinical Molecular Genetics Fellow

1991-1995	Department of Molecular & Human Genetics, Baylor College of Medicine Postdoctoral Research Associate
1987-1990	Institute for Molecular Genetics, Baylor College of Medicine Postdoctoral Fellow, Section of Hematology & Oncology Northwestern University, Medical School, Chicago, IL
1984-1986	Graduate Research Assistant, Cornell University, Ithaca, NY
1982-1984	Teaching Assistant, Cornell University, Ithaca, NY

## A. SCHOLARSHIP

### A.1. Original Articles (127 Total)

- Hussein Abbas, Bofei Wang, Patrick Reville, Fatima Zahra Jelloul, Poonam Desai, Pamela Borges, Christopher Ly, Ivo Veletic, Enes Dasdemir, Jared Burks, Guilin Tang, Shengnan Guo, Nicole Vaughn, Natalia Baran, Qing Deng, Jairo Matthews, **Preethi Gunaratne**, Dinler Antunes, Suhendan Ekmekcioglu, Koji Sasaki, Miriam Garcia, Branko Cuglievan, Dapeng Hao, Naval Daver, Michael Green, Marina Konopleva, Andrew Futreal, Sean Post, Mhd Yousuf Yassouf, Zhe Wang, Araceli Garza, and Cedric Nasnas. Comprehensive Characterization of IFN $\gamma$  Signaling in Acute Myeloid Leukemia Reveals Prognostic and Therapeutic Strategies. *Nature Communications* [Paper #NCOMMS-23-30422B] – 2024.
- Erez N. Baruch, Priyadahrshini Nagarajan, Frederico O. Gleber-Netto, Xiayu Rao, Tongxin Xie, Shamima Akhter, Adebayo Adewale, Islam Shajedul, Brandi J Mattson, Renata Ferrarotto, Michael K. Wong, Michael A Davies, Sonali Jindal, Sreyashi Basu, Catherine Harwood, Irene Leigh, Nadim Ajami, Andrew Futreal, Micah Castillo, **Preethi Gunaratne**, Ryan P. Goepfert, Nikhil Khushalani, Jing Wang, Stephanie Watowich, George A Calin, Michael R. Migden, Paola Vermeer, Nisha D’Silva, Dan Yaniv, Jared K Burks, Javier Gomez, Patrick M Dougherty, Kenneth Y. Tsai, James P Allison, Padmanee Sharma, Jennifer Wargo, Jeffrey N. Myers, Neil D. Gross, Moran Amit. Inflammation induced by tumor-associated nerves promotes resistance to anti-PD-1 therapy in cancer patients and is targetable by interleukin-6 blockade. Version 1. Res Sq. Preprint. 2023 Jul 18. doi: 10.21203/rs.3.rs-3161761/v1. PMID: PMC10371163
- Lianjie Miao, Micah Castillo, Yangyang Lu, Yongqi Xiao, Yu Liu, Alan R Burns, Ashok Kumar, **Preethi Gunaratne**, C Michael DiPersio, Mingfu Wu.  $\beta$ 1 integrins regulate cellular behavior and cardiomyocyte organization during ventricular wall formation. *Cardiovascular Research*. CVR-2023-1092. PMID: 37693495.
- Napoli M, Deshpande AA, Chakravarti D, Rajapakshe K, **Gunaratne PH**, Coarfa C, Flores ER. Genome-wide p63-target gene analyses reveal TAp63/NRF2-dependent oxidative stress responses. *Cancer Res Commun*. 2024 Jan 2. doi: 10.1158/2767-9764.CRC-23-0358. PMID: 38165157
- Seungmae Seo, Sagar L. Patil, Yong-Oon Ahn, Jacqueline Armetta, Everardo Hegewisch-Solloa, Micah Castillo, Nicole C. Guilz, Achchhe Patel, Barbara Corneo, Malgorzata Borowiak, **Preethi Gunaratne**, Emily M. Mace. iPSC-based modeling of helicase deficiency reveals impaired cell proliferation and increased apoptosis after NK cell lineage commitment. Version 1. bioRxiv. Preprint. 2023 Sep 25. doi: 10.1101/2023.09.25.559149. PMID: PMC10557596
- Brandon Mistretta, Sakuni Rankothgedera, Micah Castillo, Mitchell Rao, Kimberly Holloway, Anjana Bhardwaj, Maha ElNoafal, Randa El-Zein, Hengemeh Rezaei, Xiaoping Su, Rehan Akbani, Melody Shao, Rachel Karchin, Isabelle Bedrosian and **Preethi H. Gunaratne**. Chimeric RNAs reveal putative neoantigen peptides for developing tumor vaccines for breast cancer. *Front. Immunol.*, 06 September 2023. Sec. Cancer Immunity and Immunotherapy. Volume 14. doi.org/10.3389/fimmu.2023.1188831.

7. Erez N. Baruch, Priyadahrshini Nagarajan, Frederico O. Gleber-Netto, Xiayu Rao, Tongxin Xie, Shamima Akhter, Adebayo Adewale, Islam Shajedul, Brandi J Mattson, Renata Ferrarotto, Michael K. Wong, Michael A Davies, Sonali Jindal, Sreyashi Basu, Catherine Harwood, Irene Leigh, Nadim Ajami, Andrew Futreal, Micah Castillo, **Preethi Gunaratne**, Ryan P. Goepfert, Nikhil Khushalani, Jing Wang, Stephanie Watowich, George A Calin, Michael R. Migden, Paola Vermeer, Nisha D'Silva, Dan Yaniv, Jared K Burks, Javier Gomez, Patrick M Dougherty, Kenneth Y. Tsai, James P Allison, Padmanee Sharma, Jennifer Wargo, Jeffrey N. Myers, Neil D. Gross, Moran Amit. Inflammation induced by tumor-associated nerves promotes resistance to anti-PD-1 therapy in cancer patients and is targetable by interleukin-6 blockade. Version 1. Res Sq. Preprint. 2023 Jul 18. doi: 10.21203/rs.3.rs-3161761/v1. PMID: PMC10371163
8. Sandra L. Grimm, Emily F. Mendez, Laura Stertz, Thomas D. Meyer, Gabriel R. Fries, Tanmay Gandhi, Rupa Kanchi, Sudhakar Selvaraj, Antonio L. Teixeira, Thomas R. Kosten, **Preethi Gunaratne**, Cristian Coarfa and Consuelo Walss-Bass. MicroRNA–mRNA networks are dysregulated in opioid use disorder postmortem brain: Further evidence for opioid-induced neurovascular alterations. *Front. Psychiatry*, 12 January 2023. Sec. Molecular Psychiatry. Volume 13. doi.org/10.3389/fpsy.2022.1025346
9. Donorexosomebiomarkers for Primary Graft Dysfunction in Transplants Using Ex-Vivo Lung Perfusion R Kanchi, L Chacon, E D'Silva, M Salan-Gomez, A Leon-Pena, M Castillo, **P Gunaratne**, C Hochman Mendez, C Coarfa, G Loor. *The Journal of Heart and Lung Transplantation*. April 1; 42(4): S179.
10. Nicole Prodan, Faheem Ershad, Arfaxad Reyes-Alcaraz, Luge Li, Brandon Mistretta, Lei Gonzalez, Zhoulyu Rao, Cunjiang Yu, **Preethi H. Gunaratne**, Na Li, Robert J. Schwartz, Bradley K. McConnell. Direct reprogramming of cardiomyocytes into cardiac Purkinje-like cells *iScience*. 2022 Nov 18; 25(11): 105402. Published online 2022 Oct 20. doi: 10.1016/j.isci.2022.105402. PMID: PMC9646947
11. Jose Thaiparambil, Jianrong Dong, Sandra L Grimm, Dimuthu Perera, Chandra Shekar R Ambati, Vasanta Putluri, Matthew J Robertson, Tajhal D Patel, Brandon Mistretta, **Preethi H Gunaratne**, Min P Kim, Jason T Yustein, Nagireddy Putluri, Cristian Coarfa, Randa El-Zein. Integrative metabolomics and transcriptomics analysis reveals novel therapeutic vulnerabilities in lung cancer. *Cancer Med*. 2022 Jun 8. PMID: 35676822
12. Sarah E Woodfield, Brandon J Mistretta, Roma H Patel, Aryana M Ibarra, Kevin E Fisher, Stephen F Sarabia, Ilavarasi Gandhi, Jacquelyn Reuther, Zbigniew Starosolski, Andrew Badachhape, Jessica Epps, Barry Zorman, Aayushi P Shah, Samuel R Larson, Rohit K Srivastava, Yan Shi, Andres F Espinoza, Saiabhiroop R Govindu, Richard S Whitlock, Kimberly Holloway, Angshumoy Roy, Pavel Sumazin, Ketan B Ghaghada, Dolores Lopez-Terrada, **Preethi H Gunaratne**, and Sanjeev A Vasudevan. HepT1-derived murine models of high-risk hepatoblastoma display vascular invasion, metastasis, and circulating tumor cells. *Biol Open*. 2022 Sep 15;11(9): bio058973. doi: 10.1242/bio.058973. Epub 2022 Sep 12. PMID: 35451474
13. Yajuan Li, Zhi Tan, Yaohua Zhang, Zhao Zhang, Qingsong Hu, Ke Liang, Jun Yao, Youqiong Ye, Yi-Chuan Li, Chunlai Li, Lan Liao, Jianming Xu, Zhen Xing, Yinghong Pan, Sujash S. Chatterjee, Tina K. Nguyen, Heidi Hsiao, Sergey D. Egranov, Nagireddy Putluri, Cristian Coarfa, David H. Hawke, **Preethi H. Gunaratne**, Kuang-Lei Tsai, Leng Han, Mien-Chie Hung, George A. Calin, Fares Namour, Jean-Louis Guéant, Ania C. Muntau, Nenad Blau, V. Reid Sutton, Manuel Schiff, François Feillet, Shuxing Zhang, Chunru Lin, Liuqing Yang. A noncoding RNA modulator potentiates phenylalanine metabolism in mice *Science*. 2021 Aug 6; 373(6555): 662–673. PMID: PMC9714245
14. Yajuan Li, Yaohua Zhang, Qingsong Hu, Sergey D. Egranov, Zhen Xing, Zhao Zhang, Ke Liang, Youqiong Ye, Yinghong Pan, Sujash S. Chatterjee, Brandon Mistretta, Tina K. Nguyen, David H. Hawke, **Preethi H. Gunaratne**, Mien-Chie Hung, Leng Han, Liuqing Yang, Chunru Lin. *Genome Med*. 2021; 13: 137. Published online 2021 Aug 28. doi: 10.1186/s13073-021-00937-4. Functional significance of

gain-of-function H19 lncRNA in skeletal muscle differentiation and anti-obesity effects. PMID:PMC8403366

15. Divya Ravirala, Brandon Mistretta, Preethi H Gunaratne, Guangsheng Pei, Zhongming Zhao, Xiaoliu Zhang. Co-delivery of novel bispecific and trispecific engagers by an amplicon vector augments the therapeutic effect of an HSV-based oncolytic virotherapy. *J Immunother Cancer*. 2021; 9(7): e002454. Published online 2021 Jul 6. doi: 10.1136/jitc-2021-002454. PMID: PMC8261877
16. Stewart Fannin, Jonathan Rangel, Abiodun P. Bodurin, Tannon Yu, Brandon Mistretta, Sujina Mali, **Preethi Gunaratne**, Steven J. Bark, Jerry O. Ebalunode, Arshad Khan, William R. Widger, Mehmet Sen. Functional and structural characterization of Hyp730, a highly conserved and dormancy-specific hypothetical membrane protein. *Microbiologyopen*. 2021 Jan; 10(1): e1154. Published online 2021 Feb 3. doi: 10.1002/mbo3.1154. PMID: PMC7856521
17. Marco Napoli, Xiaobo Li, Hayley D. Ackerman, Avani A. Deshpande, Ivan Barannikov, Marlese A. Pisegna, Isabelle Bedrosian, Jürgen Mitsch, Philip Quinlan, Alastair Thompson, Kimal Rajapakshe, Cristian Coarfa, **Preethi H. Gunaratne**, Douglas C. Marchion, Anthony M. Magliocco, Kenneth Y. Tsai, Elsa R. Flores. Pan-cancer analysis reveals TAp63-regulated oncogenic lncRNAs that promote cancer progression through AKT activation. *Nat Commun*. 2020; 11: 5156. Published online 2020 Oct 14. doi: 10.1038/s41467-020-18973-w. PMID: PMC7561725
18. Smith SL, Kennedy PR, Stacey KB, Worboys JD, Yarwood A, Seo S, Solloa EH, Mistretta B, Chatterjee SS, **Gunaratne P**, Allette K, Wang YC, Smith ML, Sebra R, Mace EM, Horowitz A, Thomson W, Martin P, Eyre S, Davis DM. Diversity of peripheral blood human NK cells identified by single-cell RNA sequencing. *Blood Adv*. 2020 Apr 14;4(7):1388-1406. doi: 10.1182/bloodadvances.2019000699. PMID:32271902
19. Kalhara R. Menikdiwela, Latha Ramalingam, Mostafa M. Abbas, Halima Bensmail, Shane Scoggin, Nishan S. Kalupahana, Asha Palat, **Preethi Gunaratne**, Naima Moustaid-Moussa. Role of microRNA 690 in Mediating Angiotensin II Effects on Inflammation and Endoplasmic Reticulum Stress. *Cells*. 2020 Jun; 9(6): 1327. Published online 2020 May 26. doi: 10.3390/cells9061327. PMID:PMC7348980
20. Zhenlin Ju, Anjana Bhardwaj, Matthew D. Embury, Harpreet Singh, **Preethi H. Gunaratne**, Isabelle Bedrosian, Jing Wang. Integrative Analyses of Multilevel Omics Reveal Preneoplastic Breast to Possess a Molecular Landscape That is Globally Shared with Invasive Basal-Like Breast Cancer (Running Title: Molecular Landscape of Basal-Like Breast Cancer Progression) *Cancers (Basel)* 2020 Mar; 12(3): 722. Published online 2020 Mar 19. doi: 10.3390/cancers12030722. PMID: PMC7140033
21. Smith SL, Kennedy PR, Stacey KB, Worboys JD, Yarwood A, Seo S, Solloa EH, Mistretta B, Chatterjee SS, **Gunaratne P**, Allette K, Wang YC, Smith ML, Sebra R, Mace EM, Horowitz A, Thomson W, Martin P, Eyre S, Davis DM. Diversity of peripheral blood human NK cells identified by single-cell RNA sequencing. *Blood Adv*. 2020 Apr 14;4(7):1388-1406. doi: 10.1182/bloodadvances.2019000699. PMID:32271902
22. Green DG, Whitener AE, Mohanty S, Mistretta B, **Gunaratne P**, Yeh AT, Lekven AC. Wnt signaling regulates neural plate patterning in distinct temporal phases with dynamic transcriptional outputs. *Dev Biol*. 2020 Mar 31. pii: S0012-1606(20)30104-4. doi: 10.1016/j.ydbio.2020.03.016. PMID: 32243887
23. Integrative Analyses of Multilevel Omics Reveal Preneoplastic Breast to Possess a Molecular Landscape That is Globally Shared with Invasive Basal-Like Breast Cancer (Running Title: Molecular Landscape of Basal-Like Breast Cancer Progression). Ju Z, Bhardwaj A, Embury MD, Singh H, **Gunaratne PH**, Bedrosian I, Wang J. *Cancers (Basel)*. 2020 Mar 19;12(3). pii: E722. doi: 10.3390/cancers12030722. PMID: 32204397
24. Andrew J. Davis, Maksym Tsinkevich, Jason Rodencal, Hussein A. Abbas, Xiao-hua Su, Young-Jin Gi, Bin Fang, Kimal Rajapakshe, Cristian Coarfa, **Preethi H. Gunaratne**, John M. Koomen, Kenneth Y. Tsai, Elsa R. Flores. TAp63-regulated microRNAs suppress cutaneous squamous cell carcinoma through

- inhibition of a network of cell cycle genes. *Cancer Res.* 2020 Jun 15; 80(12): 2484–2497. PMID: PMC7299759
25. Raghunathan S, Islas JF, Mistretta B, Iyer D, Shi L, **Gunaratne PH**, Ko G, Schwartz RJ, McConnell BK. Conversion of human cardiac progenitor cells into cardiac pacemaker-like cells. *J Mol Cell Cardiol.* 2020 Jan;138:12-22. doi: 10.1016/j.yjmcc.2019.09.015. Epub 2019 Oct 31. PMID: 31678351
  26. Patil SL, Palat A, Pan Y, Rajapakshe K, Mirchandani R, Bondesson M, Yustein JT, Coarfa C, **Gunaratne PH**.\* MicroRNA-509-3p inhibits cellular migration, invasion, and proliferation, and sensitizes osteosarcoma to cisplatin. *Sci Rep.* 2019 Dec 13;9(1):19089. doi: 10.1038/s41598-019-55170-2. PMID: 31836741. Corresponding Author\*
  27. Havis S, Bodunrin A, Rangel J, Zimmerer R, Murphy J, Storey JD, Duong TD, Mistretta B, Gunaratne P, Widger WR, Bark SJ. A Universal Stress Protein that Controls Bacterial Stress Survival in *Micrococcus luteus*. *J Bacteriol.* 2019 Sep 23. pii: JB.00497-19. doi: 10.1128/JB.00497-19. PMID: 31548273
  28. Hu Q, Ye Y, Chan LC, Li Y, Liang K, Lin A, Egranov SD, Zhang Y, Xia W, Gong J, Pan Y, Chatterjee SS, Yao J, Evans KW, Nguyen TK, Park PK, Liu J, Coarfa C, Donepudi SR, Putluri V, Putluri N, Sreekumar A, Ambati CR, Hawke DH, Marks JR, **Gunaratne PH**, Caudle AS, Sahin AA, Hortobagyi GN, Meric-Bernstam F, Chen L, Yu D, Hung MC, Curran MA, Han L, Lin C, Yang L. Oncogenic lncRNA downregulates cancer cell antigen presentation and intrinsic tumor suppression. *Nat Immunol.* 2019 Jun 3. doi: 10.1038/s41590-019-0400-7. PMID:31160797
  29. Maria Moreno-Villanueva, Ye Zhang, Alan Feiveson, Brandon Mistretta, Yinghong Pan, Sujash Chatterjee, Winston Wu, Ryan Clanton, Mayra, Nelman-Gonzalez, Stephanie Krieger, **Preethi Gunarantne**, Brian Crucian, Honglu Wu. Single-cell RNA-sequencing identifies activation of TP53 and STAT1 pathways in human T lymphocyte subpopulations in response to ex vivo radiation exposure. *Int. J. Mol. Sci.* 2019, ijms-487137
  30. **Gunaratne PH**\*, Pan Y, Rao AK, Lin C, Hernandez-Herrera A, Liang K, Rait AS, Venkatanarayan A, Benham AL, Rubab F, Kim SS, Rajapakshe K, Chan CK, Mangala LS, Lopez-Berestein G, Sood AK, Rowat AC, Coarfa C, Pirollo KF, Flores ER, Chang EH\*. Activating p53 family member TAp63: A novel therapeutic strategy for targeting p53-altered tumors. *Cancer.* 2019 Apr 23. doi: 10.1002/cncr.32053. PMID: 31012964. Corresponding Authors\*
  31. Chen C, Meng Q, Xia Y, Ding C, Wang L, Dai R, Cheng L, **Gunaratne P**, Gibbs RA, Min S, Coarfa C, Reid JG, Zhang C, Jiao C, Jiang Y, Giase G, Thomas A, Fitzgerald D, Brunetti T, Shieh A, Xia C, Wang Y, Wang Y, Badner JA, Gershon ES, White KP, Liu C. The transcription factor POU3F2 regulates a gene coexpression network in brain tissue from patients with psychiatric disorders. *Sci Transl Med.* 2018 Dec 13. pii: eaat8178. doi: 10.1126/scitranslmed.aat8178. PMID:30545964
  32. Korkut A, Zaidi S, Kanchi RS, Rao S, Gough NR, Schultz A, Li X, Lorenzi PL, Berger AC, Robertson G, Kwong LN, Datto M, Roszik J, Ling S, Ravikumar V, Manyam G, Rao A, Shelley S, Liu Y, Ju Z, Hansel D, de Velasco G, Pennathur A, Andersen JB, O'Rourke CJ, Ohshiro K, Jogunoori W, Nguyen BN, Li S, Osmanbeyoglu HU, Ajani JA, Mani SA, Houseman A, Wiznerowicz M, Chen J, Gu S, Ma W, Zhang J, Tong P, Cherniack AD, Deng C, Resar L, **The Cancer Genome Atlas Research Network**, Weinstein JN, Mishra L, Akbani R. A Pan-Cancer Analysis Reveals High-Frequency Genetic Alterations in Mediators of Signaling by the TGF- $\beta$  Superfamily. *Cell Syst.* 2018 Sep 14. pii: S2405-4712(18)30357-0. PMID: 30268436
  33. Hoang J, Park CS, Lee HJ, Marquez MD, Zenasni O, **Gunaratne PH**, Lee TR. Quaternary Ammonium-Terminated Films Formed from Mixed Bidentate Adsorbates Provide a High-Capacity Platform for Oligonucleotide Delivery. *ACS Appl Mater Interfaces.* 2018 Oct 18. PMID: 30335936
  34. Pahlavani M, Wijayatunga NN, Kalupahana NS, Ramalingam L, **Gunaratne PH**, Coarfa C, Rajapakshe K, Kottapalli P, Moustaid-Moussa N. Transcriptomic and MicroRNA analyses of gene networks

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35. Chen L, Youssef Y, Robinson C, Ernst GF, Carson MY, Young KA, Scoville SD, Zhang X, Harris R, Sekhri P, Mansour AG, Chan WK, Nalin AP, Mao HC, Hughes T, Mace EM, Pan Y, Rustagi N, Chatterjee SS, **Gunaratne PH**, Behbehani GK, Mundy-Bosse BL, Caligiuri MA, Freud AG. CD56 Expression Marks Human Group 2 Innate Lymphoid Cell Divergence from a Shared NK Cell and Group 3 Innate Lymphoid Cell Developmental Pathway. *Immunity*. 2018 Sep 18;49(3):464-476.e4. PMID: 30193847
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37. Chiu HS, Somvanshi S, Patel E, Chen TW, Singh VP, Zorman B, Patil SL, Pan Y, Chatterjee SS; **Cancer Genome Atlas Research Network**, Sood AK, **Gunaratne PH**, Sumazin P. Pan-Cancer Analysis of lncRNA Regulation Supports Their Targeting of Cancer Genes in Each Tumor Context. *Cell Rep*. 2018 Apr 3;23(1):297-312.e12. doi: 10.1016/j.celrep.2018.03.064. PMID: 29617668
38. Campbell JD, Yau C, Bowlby R, Liu Y, Brennan K, Fan H, Taylor AM, Wang C, Walter V, Akbani R, Byers LA, Creighton CJ, Coarfa C, Shih J, Cherniack AD, Gevaert O, Prunello M, Shen H, Anur P, Chen J, Cheng H, Hayes DN, Bullman S, Peadarallu CS, Ojesina AI, Sadeghi S, Mungall KL, Robertson AG, Benz C, Schultz A, Kanchi RS, Gay CM, Hegde A, Diao L, Wang J, Ma W, Sumazin P, Chiu HS, Chen TW, **Gunaratne P**, Donehower L, Rader JS, Zuna R, Al-Ahmadie H, Lazar AJ, Flores ER, Tsai KY, Zhou JH, Rustgi AK, Drill E, Shen R, Wong CK; **Cancer Genome Atlas Research Network**, Stuart JM, Laird PW, Hoadley KA, Weinstein JN, Peto M, Pickering CR, Chen Z, Van Waes C. Genomic, Pathway Network, and Immunologic Features Distinguishing Squamous Carcinomas. *Cell Rep*. 2018 Apr 3;23(1):194-212.e6. doi: 10.1016/j.celrep.2018.03.063. PMID: 29617660
39. Wijayatunga NN, Pahlavani M, Kalupahana NS, Kottapalli KR, **Gunaratne PH**, Coarfa C, Ramalingam L, Moustaid-Moussa N. An integrative transcriptomic approach to identify depot differences in genes and microRNAs in adipose tissues from high fat fed mice. *Oncotarget*. 2018 Jan 13;9(10):9246-9261. doi: 10.18632/oncotarget.24226. eCollection 2018 Feb 6. PMID:29507687
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42. Shakiba A, Patil SL, Zenasni O, Schmitt ME, **Gunaratne PH**, Lee TR. DNA Loading and Release Using Custom-Tailored Poly(l-lysine) Surfaces. *ACS Appl Mater Interfaces*. 2017 Jul 19;9(28):23370-23378. doi: 10.1021/acsami.7b05024. Epub 2017 Jul 10. PMID: 28636320
43. Bhardwaj A, Singh H, Rajapakshe K, Tachibana K, Ganesan N, Pan Y, **Gunaratne PH**, Coarfa C, Bedrosian I. Regulation of miRNA-29c and its downstream pathways in preneoplastic progression of triple-negative breast cancer. *Oncotarget*. 2017 Jan 30. doi: 10.18632/oncotarget.14902. PMID: 28160548

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45. Chan CK, Pan Y, Nyberg K, Marra MA, Lim EL, Jones SJ, Maar D, Gibb EA, **Gunaratne PH**, Robertson AG, Rowat AC. Tumour-suppressor microRNAs regulate ovarian cancer cell physical properties and invasive behaviour. *Open Biol*. 2016 Nov;6(11). pii: 160275. PMID: 27906134
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## **A.2. The Cancer Genome Atlas Research Network Publications**

1. Li Ding, Matthew H. Bailey, Eduard Porta-Pardo, Vesteynn Thorsson, Antonio Colaprico, Denis Bertrand, David L. Gibbs, Amila Weerasinghe, Kuan-lin Huang, Collin Tokheim, Isidro Cortés-Ciriano, Reyka Jayasinghe, Feng Chen, Lihua Yu, Sam Sun, Catharina Olsen, Jaegil Kim, Alison M. Taylor, Andrew D. Cherniack, Rehan Akbani, Chayaporn Suphavitai, Niranjana Nagarajan, Josh M. Stuart, Gordon B Mills, Matthew A. Wyczalkowski, Benjamin Vincent, Carolyn M. Hutter, Jean Claude Zenklusen, Katherine A. Hoadley, Michael C. Wendl, Ilya Shmulevich, Alexander J. Lazar, David Wheeler, Gad Getz, **The Cancer Genome Atlas Research Network**. Perspective on Oncogenic Processes at the End of the Beginning of Cancer Genomics. *Cell*. 2018 Apr 5; 173(2): 305–320. PMID: PMC5916814
2. Francisco Sanchez-Vega, Marco Mina, Joshua Armenia, Walid K. Chatila, Augustin Luna, Konnor C. La, Sofia Dimitriadou, David L. Liu, Havish S. Kantheti, Sadegh Saghafein, Debyani Chakravarty, Foysal Daian, Qingsong Gao, Matthew H. Bailey, Wen-Wei Liang, Steven M. Foltz, Ilya Shmulevich, Li Ding, Zachary Heins, Angelica Ochoa, Benjamin Gross, Jianjiong Gao, Hongxin Zhang, Ritika Kundra, Cyriac Kandoth, Istemi Bahceci, Leonard Dervishi, Ugur Dogrusoz, Wanding Zhou, Hui Shen, Peter W. Laird, Gregory P. Way, Casey S. Greene, Han Liang, Yonghong Xiao, Chen Wang, Antonio Iavarone, Alice H. Berger, Trevor G. Bivona, Alexander J. Lazar, Gary D. Hammer, Thomas Giordano, Lawrence N. Kwong, Grant McArthur, Chenfei Huang, Aaron D. Tward, Mitchell J. Frederick, Frank McCormick, Matthew Meyerson, **The Cancer Genome Atlas Research Network**, Eliezer M. Van Allen, Andrew D. Cherniack, Giovanni Ciriello, Chris Sander, Nikolaus Schultz. Oncogenic Signaling Pathways in The Cancer Genome Atlas. *Cell*. 2018 Apr 5; 173(2): 321–337. doi:10.1016/j.cell.2018.03.035. PMID: PMC6070353
3. Katherine A. Hoadley, Christina Yau, Toshinori Hinoue, Denise M. Wolf, Alexander J. Lazar, Esther Drill, Ronglai Shen, Alison M. Taylor, Andrew D. Cherniack, Vésteinn Thorsson, Rehan Akbani, Reanne Bowlby, Christopher K. Wong, Maciej Wiznerowicz, Francisco Sanchez-Vega, A. Gordon Robertson, Barbara G. Schneider, Michael S. Lawrence, Houtan Noushmehr, Tathiane M. Malta, **The Cancer Genome Atlas Network**, Joshua M. Stuart, Christopher C. Benz, Peter W. Laird. Cell-of-Origin Patterns Dominate the Molecular Classification of 10,000 Tumors from 33 Types of Cancer. *Cell*. 2018 Apr 5; 173(2): 291–304. doi: 10.1016/j.cell.2018.03.022 PMID: PMC5957518
4. Matthew H. Bailey, Collin Tokheim, Eduard Porta-Pardo, Sohini Sengupta, Denis Bertrand, Amila Weerasinghe, Antonio Colaprico, Michael C. Wendl, Jaegil Kim, Brendan Reardon, Kwok-Shing Ng, Kang Jin Jeong, Song Cao, Zixing Wang, Jianjiong Gao, Qingsong Gao, Fang Wang, Eric Minwei Liu, Loris Mularoni, Carlota Rubio-Perez, Niranjana Nagarajan, Isidro Cortés-Ciriano, Daniel Cui Zhou, Wen-Wei Liang, Julian M. Hess, Venkata D. Yellapantula, David Tamborero, Abel Gonzalez-Perez, Chayaporn Suphavitai, Jia Yu Ko, Ekta Khurana, Peter J. Park, Eliezer Van Allen, Han Liang, The MC3 Working Group, **The Cancer Genome Atlas Research Network**, Michael Lawrence, Adam Godzik, Nuria Lopez-Bigas, Josh Stuart, David Wheeler, Gad Getz, Ken Chen, Alexander J. Lazar, Gordon B Mills, Rachel Karchin, Li Ding. Comprehensive Characterization of Cancer Driver Genes and Mutations. *Cell*. 2018 Apr 5; 173(2): 371–385. doi: 10.1016/j.cell.2018.02.060. Correction in: *Cell*. 2018 Aug 9; 174(4): 1034–1035. PMID: PMC6029450
5. Theo A. Knijnenburg, Linghua Wang, Michael T. Zimmermann, Nyasha Chambwe, Galen F. Gao, Andrew D. Cherniack, Huihui Fan, Hui Shen, Gregory P. Way, Casey S. Greene, Yuexin Liu, Rehan Akbani, Bin Feng, Lawrence A. Donehower, Chase Miller, Yang Shen, Mostafa Karimi, Haoran Chen, Pora Kim, Peilin Jia, Eve Shinbrot, Shaojun Zhang, Jianfang Liu, Hai Hu, Matthew H. Bailey, Christina Yau, Denise Wolf,



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6. A Pan-Cancer Analysis of Enhancer Expression in Nearly 9000 Patient Samples  
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8. Michael Seiler, Shouyong Peng, Anant A. Agrawal, James Palacino, Teng Teng, Ping Zhu, Peter G. Smith, **The Cancer Genome Atlas Research Network**, Silvia Buonamici, Lihua Yu. Somatic Mutational Landscape of Splicing Factor Genes and Their Functional Consequences across 33 Cancer Types. *Cell Rep.* 2018 Apr 3; 23(1): 282–296.e4. doi: 10.1016/j.celrep.2018.01.088. PMCID: PMC5933844
9. Alison M. Taylor, Juliann Shih, Gavin Ha, Galen F. Gao, Xiaoyang Zhang, Ashton C. Berger, Steven E. Schumacher, Chen Wang, Hai Hu, Jianfang Liu, Alexander J. Lazar, **The Cancer Genome Atlas Research Network**, Andrew D. Cherniack, Rameen Beroukhim, Matthew Meyerson. Genomic and Functional Approaches to Understanding Cancer Aneuploidy. *Cancer Cell.* 2018 Apr 9; 33(4): 676–689.e3. Published online 2018 Apr 2. doi: 10.1016/j.ccell.2018.03.007. PMCID: PMC6028190
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12. Yumeng Wang, Xiaoyan Xu, Dejan Maglic, Michael T. Dill, Kamalika Mojumdar, Patrick Kwok-Shing Ng, Kang Jin Jeong, Yiu Huen Tsang, Daniela Moreno, Venkata Hemanjani Bhavana, Xinxin Peng, Zhongqi Ge, Hu Chen, Jun Li, Zhongyuan Chen, Huiwen Zhang, Leng Han, Di Du, Chad J. Creighton, Gordon B. Mills,

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### **A.3. Invited Book Chapters and Review Articles (10 Total)**

1. Johnson Hoang, Pooria Tajalli, Mina Omidian, Maria D Marquez, Orawan Khantamat, Wirote Tuntiwechapikul, Chien-Hung Li, Arati Kohlihatkar, Hung-Vu Tran, **Preethi H Gunaratne**, T Randall Lee Self-Assembled Monolayers Derived from Positively Charged Adsorbates on Plasmonic Substrates for MicroRNA Delivery: A Review. *Journal of Nanotheranostics* 4 (2), 171-200
2. Yarchoan M, Agarwal P, Villanueva A, Rao S, Dawson LA, Llovet JM, Finn RS, Groopman JD, El-Serag HB, Monga SP, Wang XW, Karin M, Schwartz RE, Tanabe KK, Roberts LR, **Gunaratne PH**, Tsung A, Brown KA, Lawrence TS, Salem R, Singal AG, Kim AK, Rabiee A, Resar L, Hoshida Y, He AR, Ghoshal K, Ryan PB, Jaffee EM, Guha C, Mishra L, Coleman CN, Ahmed MM. Recent Developments and Therapeutic Strategies against Hepatocellular Carcinoma. *Cancer Res.* 2019 Sep 1;79(17):4326-4330. doi: 10.1158/0008-5472.CAN-19-0803. PMID: 31481419
3. Al-Jawadi A, Moussa H, Ramalingam L, Dharamawardhane S, Gollahon L, **Gunaratne P**, Layeequr Rahman R, Moustaid-Moussa N. Protective properties of n-3 fatty acids and implications in obesity-associated breast cancer. *J Nutr Biochem.* 2017 Oct 4; 53:1-8. doi: 10.1016/j.jnutbio.2017.09.018. Review. PMID:29096149
4. **Preethi H. Gunaratne\*** and Jayantha B. Tennakoon. Computational Biology of microRNA-Pluripotency Gene Networks in Embryonic Stem Cells. *eBook: Computational Biology of Embryonic Stem Cells.* <http://www.bentham.org/ebooks> \*Corresponding Author
5. **Gunaratne PH**, Coarfa C, Soibam B, Tandon A. miRNA Data Analysis: Next-Gen Sequencing. *Methods Mol Biol.* 2012; 822:273-88. PMID: 22144206
6. **Gunaratne PH\***, Creighton CJ, Watson M, Tennakoon JB. Large-Scale Integration of MicroRNA and Gene Expression Data for Identification of Enriched MicroRNA-mRNA Associations in Biological Systems. *Methods Mol Biol.* 2010; 667:297-315. PMID: 20827542. \*Corresponding Author
7. **Gunaratne PH.** Embryonic Stem Cell MicroRNAs: Defining Factors in Induced Pluripotent (iPS) and Cancer (CSC) Stem Cells? *Curr Stem Cell Res Ther.* 2009 Sep 1. PMID: 19492978.
8. Creighton CJ, Reid JG, **Gunaratne PH.** Expression profiling of microRNAs by deep sequencing. *Briefings in Bioinformatics.* 2009 Mar 30. PMID: 19332473.
9. Worley, KC and **Gunaratne, P** (2005). "The Rat Genome" in RA Meyers (Ed.), *Encyclopedia of Molecular Cell Biology and Molecular Medicine*, 433-480. Wiley-VCH Verlag GmbH & Co. KgaA: Weinheim.
10. **Gunaratne, PH** (2004). Sampling the Transcriptome of Stem Cells and Cancer Cells using Microarrays and cDNA Sequence Tags (Advances in Genome Biology & Technology 2004 Meeting Report). *Expert Reviews in Molecular Diagnostics*, 4(6):757-760.

### **A.4. Abstracts and Presentations (121 Total)**

1. Sakuni Rankothgedera, Micah Castillo, Shiyanth Thevasagayampillai, Cole Woody, Aaranyah Kandasamy, Armando Diaz, Michael Wick, **Preethi Gunaratne**. Discovery of immunogenic neo-peptides from actionable RNA fusions for developing cancer vaccines. *AACR Annual Meeting*, April 5-10, San Diego, CA, 2024.
2. Anjana Bhardwaj, Shiyanth Thevasagayampillai, Sakuni Rankothgedera, Prisha Verma, Micah Castillo, Alexander Koh, Albarracin Constance, **Preethi Gunaratne**, Isabelle Bedrosian. Chimeric RNAs are

- abundantly expressed in precancerous breast tissue of sporadic breast cancer patients. *AACR Annual Meeting*, April 5-10, San Diego, CA, 2024.
3. Poonam N Desai, Bofei Wang, Patrick K Reville, Fatima Z Jelloul, Pamela Borges, Jayastu Senapati, Micah Castillo, **Preethi Gunaratne**, Naveen Pemmaraju, Tapan M Kadia, Farhad Ravandi, Guillermo Garcia-Manero, Naval Daver, Hussein A Abbas. *Blood*. 142: 64. *ASH (American Society of Hematology) Annual Meeting*, San Diego, CA, December 9-12, 2023.
  4. Bofei Wang, Christopher Ly, Enes Dasedemir, Fatima Z. Jelloul, Poonam Desai, Pamela Borges, Jessica Root, Guilin Tang, **Preethi H Gunaratne**, Sreyashi Basu, Sonali Jindal, Yulong Chen, Khalida M Wani, Alexander Lazar, Padmanee Sharma, Patrick K. Reville, Hussein A. Abbas. *ASH (American Society of Hematology) Annual Meeting*, San Diego, CA, December 9-12, 2023.
  5. Bofei Wang, Christopher Ly, Fatima Zahra Jelloul, Enes Dasedemir, Guilin Tang, Sonali Jindal, Yulong Chen, Sreyashi Basu, Poonam Desai, Pamela Borges, **Preethi Gunaratne**, Natalia Baran, Qing Deng, Dapeng Hao, Sean Post, Michael Green Green, Marina Konopleva, Andy Futreal, Padmanee Sharma, Hussein A Abbas. Leveraging single cell RNA profiling to uncover intra-tumor heterogeneity across cytogenetic subgroups in acute myeloid leukemia. *Cancer Res*. 2023. April 14; 83. Supplement 7: 5927-5927. *AACR Annual Meeting*, April 14-19, Orlando, FL, 2023
  6. Anjana Bhardwaj, Zhenlin Ju, Constance T. Albarracin, Celestine Trinidad, Brandon Mistretta, Preethi Gunaratne, Jing Wang, Randa El Zein, Isabelle Bedrosian. Subtype-specific molecular signatures of field cancerization in patients with sporadic breast cancer. *Cancer Res*. 2023. April 14; 83. Supplement 7: 6521-6521 *AACR Annual Meeting*, April 14-19, Orlando, FL, 2023
  7. Prisha Verma, Micah Castillo, Sakuni V. Rankothgedera, and Preethi H. Gunaratne. Framework to determine fusion junction of novel RNA fusions and their actionability for personalized therapy of lung cancer patients. *Cancer Res*. 2023. April 14; 83. Supplement 7: 264-264. *AACR Annual Meeting*, April 14-19, Orlando, FL, 2023
  8. Isabelle Bedrosian, Zhenlin Ju, Anjana Bhardwaj, Brandon Mistretta, **Preethi Gunaratne**, Jing Wang, Randa El Zein. Identification of a subtype specific molecular field across the mammary gland of breast cancer patients. *AACR Annual Virtual meeting 2020*
  9. Brandon Mistretta, Isabelle Bedrosian, Randa El-Zein, **Preethi Gunaratne**. Exploring peripheral blood T lymphocyte heterogeneity and its relationship to breast cancer progression. *Cell Symposia: Hallmarks of Cancer*, Seattle, November 17-19, 2019
  10. Asha Palat and **Preethi Gunaratne**. Metabolic reprogramming of ovarian cancer cells to improve conditions favoring immune cell mediated cytotoxicity in the tumor microenvironment. *Cell Symposia: Hallmarks of Cancer*, Seattle, November 17-19, 2019
  11. Asha Palat, Yinghong Pan, Ke Liang, Chunru Lin, **Preethi Gunaratne**. Metabolic reprogramming of ovarian cancer cells to improve conditions favoring immune cell mediated cytotoxicity in the tumor microenvironment. *Cell Symposia: Metabolites as Signaling Molecules*, Seattle, December 9-11, 2018.
  12. **Preethi Gunaratne**, Pavel Sumazin, Cristian Coarfa, Pieter Mestagh, Steve Lefever, Cecilia Williams, Karen Mackenzie, Anil Sood. Regulatory networks involving long non-coding RNAs (LncRNAs) and estrogen receptor (ER) in pan-gynecologic tumors. *TCGA (The Cancer Genome Atlas) Legacy Meeting*, Washington DC, September 27-29, 2018.
  13. Nadeeja N. Wijayatunga, Mandana Pahlavani, Rao Kottapalli, John A. Dawson, Latha Ramalingam, **Preethi H. Gunaratne**, Cristian Coarfa, Kimal Rajapakshe, Nishan S. Kalupahana and Naima Moustaid-Moussa. Adipose depot-specific differences in transcriptome and microRNA expression in high fat diet induced obese mice. *ASBMB-2106 Annual Meeting*, April 2 - 6, 2016, San Diego, CA
  14. Mandana Pahlavani, Nadeeja N. Wijayatunga, Rao Kottapalli, Latha Ramalingam, **Preethi H. Gunaratne**, Cristian Coarfa, Kimal Rajapakshe, Nishan S. Kalupahana and Naima Moustaid-Moussa.

15. Transcriptomic and MicroRNA Analyses Identify Gene Networks Regulated by Eicosapentaenoic Acid in Brown Adipose Tissue from Diet-Induced Obese Mice. *ASBMB-2016 Annual Meeting*, April 2-6, 2016, San Diego, CA
16. Gordon Robertson, **Preethi Gunaratne**, Seth P. Lerner, Andrew Mungall, Denise Brooks, Reanne Bowlby, Payal Sipahimalani, Stvene J. Jones, Marco A. Marra, Katherine Hoadley, David Kwiatkowski, Jonathan Rosenberg, John N. Weinstein, The Cancer Genome Atlas (TCGA) Project analysis of microRNA and gene expression subtypes of high-grade muscle invasive urothelial carcinoma. *Society of Urologic Oncology (SUO) 16<sup>th</sup> Annual Meeting*, December 02 -04, 2015, Washington DC.
17. Y. Pan, A. Hernandez-Herrera, A. Benham, A. Venkatanarayan, C. Chan, A. Rowat, K. Rajapakshe, S. Duvvuri, C. Coarfa, E. Flores, **P. Gunaratne**. MiR-130b Sensitize Ovarian Cancer to Cisplatin and BH3-mimetics by Inducing TAp63 and Its Downstream Gene Bim. *CPRIT- 2015 Innovations Conference*, November 9<sup>th</sup>-10<sup>th</sup>, Austin TX
18. Clara K Chan, Yinghong Pan, Gordon Robertson, **Preethi Gunaratne**, Amy C Rowat. MicroRNAs Regulate Ovarian Cancer Mechanotype. American Society for Cell Biology (ASCB) Annual Meeting, December 12-16, San Diego, CA.
19. M. Napoli, A. Venkatanarayan, P. Raulji, W. Norton, L. Mangala, A. Sood, C. Rodriguez-Aguayo, G. Lopez-Berestein, K. Tsai, H. Abbass, C. Coarfa, **P. Gunaratne**, E. Flores. Pharmacologic Inhibition of the ΔNp63/DGCR8 Axis as a Novel Therapeutic Strategy for p53 Deficient and Mutant Tumors. *AACR 106<sup>th</sup> Annual Meeting* 2015; April 18-22, 2015; Philadelphia, PA
20. S. Patil, P. Gunaratne, J. Yustein. MiR-509-3p Inhibits Osteosarcoma Migratory Properties And Enhances Sensitivity To Cisplatin. *CPRIT- 2015 Innovations Conference*, November 9<sup>th</sup>-10<sup>th</sup>, Austin TX
21. Gordon Robertson, **Preethi Gunaratne**, Seth Lerner, Andrew Mungall, Denise Brooks, Reanne Bowlby<sup>1</sup>, Payal Sipahimalani, Steven Jones, Marco Marra, Katherine Hoadley, David Kwiatkowski and John Weinstein. The Cancer Genome Atlas (TCGA) project analysis of microRNA and gene expression subtypes of high-grade muscle invasive urothelial carcinoma. *Society for Urologic Oncology, Annual Meeting*, December 2-4, 2015 in Washington, DC
22. Cristian Coarfa, **Preethi Gunaratne** and Shannon M Hawkins. Gene Signature of PTENmutantDICER+/-Endometrial Cancer Predicts Worse Survival. Society for *Reproductive Investigation (SRI), 62<sup>nd</sup> Annual Scientific Meeting*. March 25<sup>th</sup> - 28<sup>th</sup>, 2015, San Francisco, CA. \*(Selected for Oral Presentation).
23. Yinghong Pan, Anadulce Hernandez-Herrera, Avinashnarayan Venkatanarayan, Clara K. Chan, Amy C. Rowat, Kimal Rajapakshe, Seshagiri Duvvuri, Cristian Coarfa, Elsa R. Flores, **Preethi H. Gunaratne**. miRNA-130b attenuates ovarian cancer cell proliferation, migration/invasion, and sensitizes ovarian cancer to cisplatin and BH3-mimetics by inducing TAp63 and Bim. *12<sup>th</sup> Annual Dan L. Duncan Cancer Center Symposium*. Houston, TX. January 26, 2015.
24. Sagar Patil, Jason Yustein and **Preethi Gunaratne**. Investigating the role of miR-509-3p in inhibiting migration and in sensitizing cisplatin drug effect on osteosarcoma cells. *12<sup>th</sup> Annual Dan L. Duncan Cancer Center Symposium*. Houston, TX. January 26, 2015.
25. Yinghong Pan, Anadulce Hernandez-Herrera, Clara Chan, Amy Rowat, and **Preethi H. Gunaratne**. miR-130b Regulates Ovarian Cancer Cell Migration via Tumor Protein 53-Induced Nuclear Protein 1. *Keystone Symposia on RNA Silencing*. Seattle Washington. January 31, 2014 - February 5, 2014.
26. Clara Chan, Anadulce Hernandez-Herrera, Yinghong Pan, **Preethi Gunaratne**, Gordon Robertson, Amy Rowat. Cell Mechanical Phenotyping for Screening microRNA-based Therapeutics. *University of California Bioengineering Symposium*. UC Irvine, 2014.
27. **Preethi Gunaratne**, Yinghong Pan, Lykke Pedersen, Emilia Lim, Anadulce Hernandez-Herrera, Amy C Rowat, Clara Chan, Andy Chu, Yunfei Wen, Xinna Zhang, Payal Sipahimalani, Reanne Bowlby, Denise Brooks, Nina Thiessen, Yussanne Ma, Richard A Moore, Jacquie E Schein, Andrew J Mungall, Chad V.

- Pecot, Anil K. Sood, Steven JM Jones, Marco A Marra, and Gordon Robertson. microRNA 509 impairs migration and invasion, and impacts clinical outcomes in high-grade serous ovarian cancer. *The Cancer Genome Atlas' 3rd Annual Scientific Symposium*. Natcher Conference Center. National Institutes of Health. Bethesda, MD. May 12-13, 2014.
28. Vida Chitsazzadeh, Tri Nguyen, Valencia Thomas, Michael Migden, Aaron Joseph, **Preethi Gunaratne**, Cristian Coarfa, Xiaoping Su, Elsa R. Flores, Kenneth Y. Tsai. "Identification and Functional Analysis of Key Genetic Drivers of Cutaneous Squamous Cell Carcinoma. *Society for Investigative Dermatology (SID) Annual Meeting*. Albuquerque, NM (May 2014).
  29. Vida Chitsazzadeh, Tri Nguyen, Valencia Thomas, Michael Migden, Aaron Joseph, **Preethi Gunaratne**, Cristian Coarfa, Xiaoping Su, Elsa R. Flores, Kenneth Y. Tsai. "Identification and Functional Analysis of Key Genetic Drivers of Cutaneous Squamous Cell Carcinoma. *Translational Science 2014 National Conference*. Omni Shoreham Hotel at Washington, DC (April 2014).
  30. Single-Molecule Sequencing of the Estrogen Receptor  $\alpha$  Transcriptome in Breast Cancer Cells Reveals Novel Mechanisms. Philip Jonsson, Cristian Coarfa, **Preethi Gunaratne** and Cecilia Williams. *Advances in Genome Biology & Technology Conference*. Marco Island, Florida, February 12-15, 2014.
  31. Robertson AG, **Gunaratne PG**, Pedersen L, Chu A, Lim E, Xiao W, Bowlby R, Chun HJE, Ma Y, Mungall AJ, Jones SJM, Marra MA and the TCGA Research Network. Crosstalk between the miR-506-514 cluster and the miR-200 family influences ovarian cancer clinical outcomes through the epithelial-mesenchymal transition and the extra-cellular matrix. *TCGA Steering Committee Meeting*. Seattle, Washington. May 1-3, 2013.
  32. Anadulce Hernandez-Herrera, Ashley L. Benham, Weimin Xiao, Chad J. Creighton, Avinashnarayan Venkatanarayan, Jason M. Shohet, Matthew L. Anderson, Elsa R. Flores, and **Preethi H. Gunaratne** and the TCGA Network. Genotype matched tumor suppressor microRNAs for personalized treatment of ovarian cancer. *Noncoding RNAs in Development and Cancer*. Vancouver, Canada, January 20-25, 2013.
  33. Saurabh Agarwal, Zaowen Chen, **Preethi Gunaratne**, Jason Shohet. Epigenetic regulation of cancer stem cell enriched microRNAs in neuroblastoma. *Stem Cell Regulation in Homeostasis and Disease*. Banff, Canada, February 24–March 1, 2013.
  34. Bliss-Moreau M, Coarfa C, Xiao W, **Gunaratne P**, Krett NL and Rosen ST. Synergy of small-molecule inhibitors in cutaneous T-Cell lymphoma cells: A discovery tool to define therapeutic targets in T-cell receptor (TCR) signaling pathways. *American Society of Hematology* meeting 2013.
  35. Krett NL, Qian J, Xiao W, Coarfa C, **Gunaratne P** and Rosen ST. Genomic mapping of glucocorticoid receptor binding in multiple myeloma. *XIII International Myeloma Workshop*. Kyoto Japan. Abstract P-23. 2013.
  36. Krett NL, Qian J, Xiao W, Coarfa C, **Gunaratne P** and Rosen ST. Genomic mapping of glucocorticoid receptor binding in multiple myeloma. *Proceedings 95th Annual Endocrine Society Meeting*. Abstract #8612, 2013.
  37. Krett NL (Invited speaker), Tessel M, Benham A, **Gunaratne P**, and Rosen ST. GC and microRNA: A newly discovered cross talk. *The Neuroendocrine Immune Basis of the Rheumatic Diseases (NEIRD) Conference*. Santa Margherita Ligure, Genova-Italy 2013. \*(Selected for Oral Presentation).
  38. Vida Chitsazzadeh, Tri Nguyen, Valencia Thomas, Michael Migden, Aaron Joseph, **Preethi Gunaratne**, Cristian Coarfa, Xiaoping Su, Elsa R. Flores, Kenneth Y. Tsai. "Identification and Functional Analysis of Key Genetic Drivers of Cutaneous Squamous Cell Carcinoma. *Texas Regional CTSA Consortium (TRCC), TL1 & KL2 Scholars retreat*. Grand Hyatt Hotel at San Antonio, TX (November 2013).
  39. Vida Chitsazzadeh, Tri Nguyen, Valencia Thomas, Michael Migden, Aaron Joseph, **Preethi Gunaratne**, Cristian Coarfa, Xiaoping Su, Elsa R. Flores, Kenneth Y. Tsai. "Identification and Functional Analysis of Key Genetic Drivers of Cutaneous Squamous Cell Carcinoma. *American Physician Scientists*

- Association (APSA) 2012 South Regional Meeting*. University of Texas Health Science Center at San Antonio, TX (October 2013).
40. Vida Chitsazzadeh, Tri Nguyen, Valencia Thomas, Michael Migden, Aaron Joseph, **Preethi Gunaratne**, Cristian Coarfa, Xiaoping Su, Elsa R. Flores, Kenneth Y. Tsai. "Identification and Functional Analysis of Key Genetic Drivers of Cutaneous Squamous Cell Carcinoma. *Fourth Annual Advances in Oncology-From Clinical Science to Clinical Practice Conference*. Brown Foundation Institute of Molecular Medicine, Houston, TX (October 2013).
  41. Vida Chitsazzadeh, Tri Nguyen, Valencia Thomas, Michael Migden, Aaron Joseph, **Preethi Gunaratne**, Cristian Coarfa, Xiaoping Su, Elsa R. Flores, Kenneth Y. Tsai. "Identification and Functional Analysis of Key Genetic Drivers of Cutaneous Squamous Cell Carcinoma." *Annual Medical School Research Retreat*. Willerson Discovery Hall of the Institute of Molecular Medicine, Houston, TX (October 2013).
  42. **Preethi Gunaratne**, Abhi Rao, Anadulce Hernandez-Herrera, Antonina Rait, Kathleen F. Pirolo, Ashley L. Benham, Weimin Xiao, David Wheeler, Richard A. Gibbs, Chad J. Creighton, Esther H. Chang. A Tumor-Targeted Nanocomplexed microRNA for Sensitizing High-Grade Ovarian Cancer to Chemotherapy. *TCGA 2<sup>nd</sup> Annual Scientific Symposium*. Washington DC. November 27-28, 2012.
  43. Rajib Ghosh, Lalithya C Singh, Jason M. Shohet and **Preethi H Gunaratne**. A Novel gold nanoparticle platform for efficient delivery of functional microRNAs into cancer cells. *2<sup>nd</sup> inaugural CPRIT Proceedings*. October 23-26, 2012.
  44. Ghosh R, Chen Z, Patterson D, Sikorski DN, Kim ES, Shohet JM and **Gunaratne PH**. (2012) Oncogenic hsa-miR-1323 down-regulates MYCN/ALK and reveals PAG1 as a novel tumor suppressor for neuroblastoma at 103rd AACR Annual Meeting, MARCH 30-April 4 2012, Chicago, IL.
  45. Ghosh R, Jayarathne LC and **Gunaratne PH**. (2011). Novel amine-functionalized gold nanoparticles for efficient delivery of functional microRNAs into neuroblastoma cells. *AACR International Conference on New Horizons in Cancer Research: Biology to Prevention to Therapy*, December 2011, Delhi, India. (Recipient of AACR Scholar-in-Award). \*(Selected for Oral Presentation).
  46. Hutson, Anne M., Sam, Christina A, Mori-Akiyama, Yuko and **Gunaratne, Preethi H**. (2011) *Digestive Disease Week, American Gastroenterology, Proceedings*. May 7-10, 2011. Chicago, IL.
  47. Ashley L. Benham, Anadulce Herrera-Hernandez, Weimin Xiao, Jason Shohet, Matthew L. Anderson, David A. Wheeler, Richard A. Gibbs, **Preethi Gunaratne**. (2011) The Cancer Genome Atlas Research Network. TCGA ovarian cancer data reveals a strategy to exploit p63-regulated microRNAs to compensate for the loss of p53 function in high-grade serous ovarian cancer. *NCI/NHGRI - TCGA Steering Committee Proceedings*. April 27, 2011. Washington, DC.
  48. Chad Creighton, Anadulce Hernandez-Herrera, Douglas Levine, Anders Jacobsen, Parminder Mankoo, Nikolaus Schultz, Ying Du, Yiqun Zhang, Erik Larsson, Robert Sheridan, Weimin Xiao, Paul Spellman, Gad Getz, David Wheeler, Charles Perou, Richard Gibbs, Chris Sanders, Neil D. Hayes, **Preethi Gunaratne**. (2011)\_The Cancer Genome Atlas Research Network. Integrated analyses of microRNAs in high-grade serous ovarian carcinoma. *NCI/NHGRI - TCGA Steering Committee Proceedings*. April 27, 2011. Washington, DC.
  49. Rajib Ghosh, Zaowen Chen, Danielle Patterson, Lalithya C Jayarathne , Jason Shohet and **Preethi H Gunaratne**. (2011) miR-1323 a microRNA that targets and silences oncogenes MYCN and ALK is itself oncogenic. *2011 Annual Meeting, Keystone Symposia, microRNAs & Cancer Proceedings*. February 11-16, Banf Canada.
  50. Jason M. Shohet, Danielle Patterson, Ashley Benham, Pieter Mestdagh, Zaowen Chen, Cristi Coarfa, Eugene Kim and **Preethi Gunaratne**. (2011) Identification of Tumor Initiating Cell Specific MicroRNA Signature in Neuroblastoma. *2011 Annual Meeting, Keystone Symposia, microRNAs & Cancer Proceedings*. February 11-16, Banf Canada.

51. Hernandez-Herrera A, Jayarathne LC, and **Gunaratne PH.** (2010) Functionalized gold nanoparticles for delivery of functional microRNAs into living cells. *1<sup>st</sup> inaugural CPRIT Proceedings*. November 17-20, 2010. Austin, TX.
52. Ashley Benham, Matthew Anderson, and **Preethi Gunaratne.** (2010) miR-130b Functions as a Tumor Suppressor in Ovarian Cancer. *1<sup>st</sup> inaugural CPRIT Proceedings*. November 17-20, 2011. Austin, TX.
53. Rajib Ghosh, Jason Shohet, and **Preethi Gunaratne.** (2010) hsa-miR-1323 regulates cell cycle and EMT pathways by targeting oncogenic MYCN and ALK in neuroblastoma. *1<sup>st</sup> inaugural CPRIT Proceedings*. November 17-20, 2010. Austin, TX.
54. Claire M. Mach, Matthew L. Anderson, Jong Kim, Chad J. Creighton and **Preethi Gunaratne.** (2010) A Novel Family of MicroRNAs that Determine Chemosensitivity and Survival for Women with Ovarian Cancer. *1<sup>st</sup> inaugural CPRIT Proceedings*. November 17-20, 2010. Austin, TX.
55. Lixin Zhang, Peggy S. Sullivan, **Preethi Gunaratne** and Dario Marchetti. (2010) MicroRNA-1258 Suppresses Breast Cancer Brain Metastasis by Targeting Heparanase. *1<sup>st</sup> inaugural CPRIT Proceedings*. November 17-20, 2010. Austin, TX.
56. Lisa K. Mullany, Heng-Yu Fan, Zhilin Liu, Lisa D. White, Alexander Marshall, **Preethi Gunaratne**, Matthew Anderson, Chad Creighton and JoAnne Richards. (2010) Molecular characterization of a new mouse model of ovarian serous adenocarcinoma relevant for understanding the etiology and mechanisms of in the human disease. *1<sup>st</sup> inaugural CPRIT Proceedings*. November 17-20, 2010. Austin, TX.
57. Zhifeng Yu, Chad J. Creighton, Michael D. Fountain, **Preethi H. Gunaratne**, Matthew L. Anderson, Martin M. Matzuk. (2010) MiR-31 is a tumor suppressor microRNA that functions in ovarian cancer. *Society for the Study of Reproduction (SSR) 43rd Annual Meeting* Milwaukee, Wisconsin, 2010. SSR#023416 \*(Selected for Oral Presentation).
58. Tessel M, Krett NL, Rosen ST, **Gunaratne P.** Regulation of Glucocorticoid Receptor in Multiple Myeloma by microRNA. *AACR Annual Meeting* Abstract #3181. Washington, DC, April 2010.
59. **Preethi H. Gunaratne**, Rajib Ghosh, Claire Mach, Chad J. Creighton, Douglas A. Levine, D. Neil Hayes, David Wheeler, Martin M. Matzuk, Matthew L. Anderson, Richard A. Gibbs, TCGA consortium. (2010) Identification of Novel Tumor Suppressor microRNAs Implicated in Epithelial Ovarian Cancer from the 19q13.41 Non-Coding RNA cluster. *AACR Annual Meeting* Abstract 10-A-7254. Washington, DC, April 2010.
60. Andrew Ludwig, Cristian Coarfa, Zaowen Chen, Rajib Ghosh, **Preethi H. Gunaratne** and Jason M. Shohet. (2010) Chromatin immunoprecipitation and High throughput sequencing (ChIP-seq) identifies novel MYCN suppressed microRNAs in neuroblastoma. *American Society of Pediatric Hematology/Oncology's 23rd Annual Meeting*, Montreal, Quebec, Canada. April 7-10, 2010.
61. Chad Creighton, Michael Fountain, Zhifeng Yu, Ankur Nagaraja, Huifeng Zhu, Mahjabeen Khan, Emuejevoke Olokpa, **Preethi Gunaratne**, Martin Matzuk, Matthew Anderson. (2010) Massively Parallel Sequencing Identifies miR-31 as a Key Tumor Suppressor in Papillary Serous Ovarian Cancers. *Proceeding of the Society of Gynecologic Oncologists (SGO)*. March 14-17, 2010 in San Francisco, California. (Plenary Talk - Anderson) **Basic Science Prize** - 41<sup>st</sup> Annual Meeting, SGO
62. Tessel M, **Gunaratne P.** Krett NL, Rosen ST. Micro-RNA Involvement in Regulation of Glucocorticoid Receptor in Myeloma Cell Lines. Jensen Symposium on Nuclear Receptors. Cincinnati, OH, October 2009.
63. **Preethi H. Gunaratne**, Laising Yen, Gobet Advincula, Matthew Anderson, Chung-Che Chang, Martin Matzuk. (2009) 'Characterization of circulating tumor cell microRNAome and secretome using Next Generation Sequencing to develop tumor specific antibodies and gold nanoparticle (Au-NP) conjugated miRNAs biosensors'. *NCI-"Circulating Tumor Cells: Emerging Technologies for Detection, Diagnostics and Treatment"*. Bethesda, Maryland. September 10-11, 2009. (Invited)

64. Andrew Ludwig, Cristian Coarfa, Zaowen Chen, Rajib Ghosh, **Preethi H. Gunaratne** and Jason M. Shohet. (2009) Chromatin immunoprecipitation and High throughput sequencing (ChIP-seq) identifies novel MYCN suppressed microRNAs in neuroblastoma. *American Cancer Society (ACS) Proceedings, 2009*.
65. Ashley Benham, J. Kim, H. Zhu, C. Creighton, P. Landry, P. Provost J. Kim, & **Preethi Gunaratne**. (2009) Establishing a Novel microRNA Discovery Platform for Mapping Uncharted Regions of the Human Genome. *AGSS Proceedings 2009*.
66. Sumanth polikepahad, Chad J Creighton, Huifeng Zhu, Alan Harris, Cristian Coarfa, Dror Berel, Aleksandar Milosavljevic, David B Corry and **Preethi H Gunaratne**. (2009) Differentially Expressed MicroRNAs in Allergic Asthma Target Genes underlying Airway Hyper Responsiveness and Goblet Cell Hyperplasia. *J. Immunol.*, Apr 2009; 182: 136.22.
67. **Preethi H. Gunaratne**. (2009) Decoding Life for Human Health: Future of Stem Cell Therapy in the Post Genome Era. Plenary Talk. *Sri Lankan Medical Association Annual Sessions*. March 19, 2009.
68. Fountain, M.D., Olokpa, E., Khan, M.F., Nagaraja, A.K., Creighton, C.J., Zhu, H., Hawkins, S., **Gunaratne, P.H.** (2009) Anderson, M.L., Matzuk, M.M. "MicroRNA Signatures for Serous Epithelial Ovarian Cancer." *2009 Annual Meeting, Keystone Symposia, Frontiers in Reproductive Biology, Santa Fe, NM*.
69. Nagaraja, A.K., Creighton, C.J., Han, D.Y., Zhu, H., **Gunaratne, P.H.**, Reid, J.G., Olokpa, E., Khan, M.F., Ma, L., Matzuk, M.M., Anderson, M.L. (2009) "MicroRNAs in the Mammalian Ovary and Ovarian Cancer." *2009 Annual Meeting, Keystone Symposia, Frontiers in Reproductive Biology, Santa Fe, NM*.
70. Khan, M.F., Olokpa, E., Dziadek, O., Creighton, C.J., Nagaraja, A.K., Han, D.Y., Hawkins, S., Zhu, H., **Gunaratne, P.H.**, Anderson, M.L. (2009) "Comprehensive Profiling of the MicroRNA Transcriptome in Uterine Smooth Muscle Tumors." *2009 Annual Meeting, Keystone Symposia, Frontiers in Reproductive Biology, Santa Fe, NM*.
71. Shannon M Hawkins, Chad Creighton, Claudia Andreu-Vieyra, Derek Han, Huifeng Zhu, Julio Agno, Jaewook Jeong, Francesco Demayo, **Preethi Gunaratne**, Martin M. Matzuk. (2009) MicroRNAs in uterine function and dysfunction, Specialized Cooperative Center Programs in *Reproduction and Infertility Research Scientific Meeting*, Chicago, IL (2009).
72. Jayantha B. Tennakoon, Hongran Wang, Cristian Coarfa, Aleks Milosavljevic, Austin J. Cooney and **Preethi H. Gunaratne**. (2009) A possible role for Dicer in H3K9 methylation at miRNA and snoRNAs clusters in imprinted regions in ES cells. *Gulf Coast Consortium/Texas Medical Center Cancer Epigenome Workshop*. May 2, 2009. \*(Selected for Oral Presentation).
73. Ashley Benham and **Preethi H. Gunaratne**. (2009) The impact of RNA editing of let-7a on oncogenic and tumor suppressive targets. *Non-coding RNAs in Cancer Symposium, Houston, TX, 2009*.
74. Matthew Linley Anderson, Mahjabeen F. Khan, Emuejevoke Olokpa, Huifeng Zhu, Nancy Ewelike, Sandra Orsulic, Richard S Roden, Dafydd G Thomas, Chad R Creighton, **Preethi Gunaratne**. (2009) Role of microRNAs in uterine leiomyosarcoma. *Connective Tissue Oncology—CTOS 15th Annual Meeting*. 2009 Miami Beach, FL.
75. Shannon M Hawkins, Chad Creighton, Claudia Andreu-Vieyra, Derek Han, Huifeng Zhu, Julio Agno, Jaewook Jeong, Francesco Demayo, **Preethi Gunaratne**, Martin M. Matzuk. (2009) The role of microRNAs in uterine dysfunction, Keystone Symposia on *Frontiers in Reproductive Biology and Regulation of Fertility*, Santa Fe, NM (2009) Abstract #122.
76. Hutson AM, **Gunaratne PH**, Shaw CA and Henning SH. (2009) MicroRNAs in villus and crypt epithelium of the mouse small intestine. *Digestive Diseases Week 2009*, Chicago, Illinois. June 1, 2009.
77. Sam CA, Shaw CA, **Gunaratne PH** and Hutson AM. (2009) Identifying a role for miR-152 in regulating Krüppel-like factor 4. Texas Medical Center-Digestive Diseases Center Symposium: *Frontiers in Digestive Diseases: Inflammation and GI Research*, Houston, Texas. February 12, 2009.



78. Hutson AM, Mori-Akiyama Y, Shaw CA, Henning SH, and **Gunaratne PH**. (2009) MicroRNAs in normal mouse intestinal epithelium and Apc(min/+) adenomas. Texas Medical Center-Digestive Diseases Center Symposium: *Frontiers in Digestive Diseases: Inflammation and GI Research*, Houston, Texas. February 12, 2009.
79. Hutson AM, Mori-Akiyama Y, Shaw CA, Henning SH, and **Gunaratne PH**. (2009) MicroRNAs in normal mouse intestinal epithelium and Apc(min/+) adenomas. 4th Annual MD Anderson Cancer Center-Baylor College of Medicine *Duncan Cancer Center Symposium: Development of Non-coding RNAs for Cancer Therapy*. Houston, Texas. January 22, 2009.
80. Ying Wang, Vinayak Brahmakshatriya, Blanca Lupiani, Sanjay Reddy, Byung-Jun Yoon, Huifeng Zhu, Preethi Gunaratne, Rui Chen, Huaijun Zhou. (2009) Identification of Differentially Expressed microRNAs In Chicken Lung and Trachea with Avian Influenza Virus Infection By Solexa Sequencer. *Plant & Animal Genomes XVII Conference*. January 10-14, 2009. San Diego, CA.
81. Khan, M.F., Olokpa, E., Dziadek, O., Creighton, C.J., Nagaraja, A.K., Roden, R., Thomas, D.G., **Gunaratne, P.H.**, Anderson, M.L. (2009) "MicroRNA Profiling Using Next Generation Sequencing: A Powerful Tool for Understanding Uterine Smooth Muscle Tumors." 2009 4<sup>th</sup> Annual M.D. Anderson Cancer Center/Baylor College of Medicine Symposium, Houston, TX.
82. Nagaraja, A.K., Creighton, C.J., Han, D.Y., Zhu, H., **Gunaratne, P.H.**, Reid, J.G., Olokpa, E., Khan, M.F., Ma, L., Anderson, M.L., Matzuk, M.M. (2009) "Comprehensive Profiling and Functional Investigation of MicroRNAs in Human Ovarian Cancer." 2009 4<sup>th</sup> Annual M.D. Anderson Cancer Center/Baylor College of Medicine Symposium, Houston, TX.
83. Role of microRNAs in stem cell gene networks. **Preethi H. Gunaratne**. (2008) American Association for the Advancement of Science (AAAS-SWARM) 2008 Proceedings. **Invited Presentation**. \*(Selected for Oral Presentation).
84. Arash O. Naghavi, Ankur K. Nagaraja, Mahjabeen Kahn, Jayantha Tennakoon, Jeffrey R. Reid, Rafal B. Drabek, Martin Matzuk, and **Preethi H. Gunaratne**. (2008) RNA editing of mmu-let-7 family results in changes in stability of mmu-let-7: ACVR2A duplex. *RNAi, MicroRNA, and Non-Coding RNA 2008 Keystone Symposia Conference* 2008 Proceedings.
85. Dynamic Changes in microRNAs may Regulate Robustness of Wnt/Notch Signaling. **Preethi H. Gunaratne**. *American Physical Society* 2008 Proceedings. **Invited Presentation**.
86. Ankur K. Nagaraja, Chad J. Creighton, Jeffrey G. Reid, **Preethi H. Gunaratne**, Claudia V. Andreu-Vieyra, Julio E. Agno, Heather L. Franco, Franco J. DeMayo, and Martin M. (2008) Mouse Models to Study the Functions of MicroRNAs in the Mammalian Reproductive Tract and Ovarian Cancer. *RNAi, MicroRNA, and Non-Coding RNA Keystone Symposia Conference Proceedings*. (2008).
87. Dziadek, O., Olokpa, E., Khan, M.F., Nagaraja, A.K., Creighton, C.J, Reid, J.G., **Gunaratne, P.H.**, Matzuk, M.M., Anderson, M.L. (2008) "The Role of MicroRNAs in Uterine Smooth Muscle Tumors." 2008 Gordon Research Conference, Proctor Academy, Andover, NH.
88. Hutson AM, Shaw CA, **Gunaratne PH** and Henning SH. (2008) MicroRNAs in villus and crypt epithelial cells of the small intestine. *Digestive Diseases Week* 2008, San Diego, California. May 19, 2008.
89. Ankur K. Nagaraja, Chad J. Creighton, Jeffrey G. Reid, **Preethi H. Gunaratne**, Lang Ma, Matthew L. Anderson, Martin M. Matzuk. (2008) MicroRNAs in Human Ovarian Cancer. Society for the Study of Reproduction *SSR 41<sup>st</sup> annual proceedings* (2008).
90. Khan, M.F., Olokpa, E., Dziadek, O., Creighton, C.J., Nagaraja, A.K., Roden, R., Thomas, D.G., **Gunaratne, P.H.**, Anderson, M.L. (2008) "MicroRNA Profiling Using Next Generation Sequencing: A Powerful Tool for Understanding Uterine Smooth Muscle Tumors." 2008 6<sup>th</sup> Annual Center Symposium, Dan L. Duncan Cancer Center, Baylor College of Medicine, Houston, TX.

91. Hutson AM, Shaw CA, Henning SH and **Gunaratne PH**. (2007) MicroRNAs detected by microarray in the proliferative crypt compartment of the small intestine. *MicroRNA and Cancer Keystone Symposium*, Keystone, Colorado. June 9, 2007.
92. **Preethi Gunaratne**, Jeffrey Reid, Chad Shaw, Francis Lynn, Yuri Fofanov, Huyen Dinh, Michael Holder, Christie Kovar, Peter Blyth, David Corry, Michelle K. Weiss, Jad El-Daye, Cheng Hsiao, Michael Fountain, Jonathan Miller, Michael German, Donna Muzny, Michael T. McManus, Richard A. Gibbs. (2007) MicroRNAs and Repeat Associated smRNAs dominate the Landscape of the Pancreatic small RNAome. *Cold Spring Harbor Symposia for Genome Biology* 2007 proceedings.
93. **Preethi H. Gunaratne**. Genome-Wide Search for MicroRNAs Correlating with Embryonic and Pancreatic Stem Cell Pluripotency & Differentiation. (2007) Southwest Regional Stem Cell Meeting Proceedings. *Southwest Regional Stem Cell Society* 2007 Proceedings. **Invited Presentation.**
94. Hutson AM, **Gunaratne PH**, Shaw CA and Henning SH. (2007) MicroRNAs detected by microarray in the small intestine. *Digestive Diseases Week* 2007, Washington, DC. May 23, 2007.
95. **Preethi H. Gunaratne**. Genome-wide search for novel microRNAs in stem cells and cancer. (2006). *American Chemical Society (ACS) SWRM Biochip symposium Proceedings. Invited Presentation.*
96. **Preethi H. Gunaratne**, David Wheeler, Ye Yuan, Angela Garcia, Anna Sneed, Marie-Claude Gingras, Judith Margolin, Richard A. Gibbs. Human Transcriptome Sampled with cDNA Sequence Tags Reveals Expression of Predicted Genes and Conserved Regions without Predictions (2005). *Advances in Genome Biology & Technology 2005 proceedings.*
97. Jia Qian Wu, Steven Hulyk, Angela M. Garcia, Ye Yuan, Anna Sneed, Carla Kowis, Edwin Fuh, Kim Haerberlen, John McPherson, **Preethi Gunaratne**, and Richard Gibbs. (2005) From large-scale RT-PCR cloning to characterization of mammalian transcriptome complexity. *American Society of Human Genetics proceedings.*
98. Dolores Lopez-Terrada, **Preethi H. Gunaratne**, Joseph F. Pulliam, Adekunle Adesina, Judith F. Margolin, Milton J. Finegold. (2004) Analysis of  $\beta$ -catenin status and Wnt pathway in different histologic subtypes of Hepatoblastoma. *Society of Pediatric Pathology Proceedings.*
99. Jia Qian Wu, Michael Brent, Lior Pachter, Angela Garcia, Steven Hulyk, David Shteynberg, Manimozhayan Arumugam, Colin Dewey, Simon Cawley, Marina Alexandersson, Imtiaz Yakub, John McPherson, **Preethi Gunaratne**, and Richard Gibbs. (2004) Large-scale RT-PCR pipeline to discover novel mammalian genes, recover full-length cDNA clones, and characterize genome complexity. *The Biology of Genomes, Cold Spring Harbor Proceedings.*
100. Divya Khurana, Marie-Claude Gingras, Hermela Louseged, Judith Margolin, Richard Gibbs, **Preethi H. Gunaratne**. (2004) Analysis of Chromosome 21-Specific Genes Identified from Gene Expression Profiling of Pediatric Acute Lymphoblastic Leukemia in Down Syndrome Patients. *Advances in Genome Biology & Technology 2004 proceedings.*
101. **Preethi Gunaratne**, Jiaqian Wu, Angela M. Garcia, Steven Hulyk, Carla Kowis, Anna Sneed, Amit Nanavati, Ye Yuan, Seema Nair, Kim Haberman, Donna Muzny, Anne Hodgson, David Steffen and A. Richard Gibbs. (2004). An RT-PCR Rescue Platform for Large-Scale Targeted Recovery of cDNA Clones. *Advances in Genome Biology & Technology 2004 proceedings.*
102. Judith Margolin, Dolores H. Lopez-Terrada, Marie-Claude Gingras, Adekunle Adesina, Milton Finegold, Divya Khurana, Leif Peterson, Richard Gibbs and **Preethi H. Gunaratne** (2004). Adaptation of the SSH/CCS/QRT-PCR Expression and Genomic Profiling for use in Clinical Medicine and Pathology: Lessons from Pediatric Acute Lymphoblastic Leukemia and Hepatoblastoma. *Advances in Genome Biology & Technology 2004 proceedings.*
103. Carla Kowis, Alan Pointdexter, David Steffen, Donna M. Muzny, Jihui Qiu, Marie-Claude Gingras, Teresa Venezia, Giodarno Bianchi, Carlos Ramos, Margaret Goodell, Gretchen Darlington, Judith Margolin, Richard A. Gibbs, **Preethi H. Gunaratne**. (2003) 'SSH-CCS platform for sequence-

- based gene expression profiling cancer cells and stem cells with a focus on novel transcript discovery'. *Stem Cell Genome Anatomy Project (SCGAP) Consortium Meeting proceedings*.
104. **Preethi Gunaratne**, Marie-Claude Gingras, Jihui Qiu, Leif E. Peterson, Divya Khurana, Natalie Walsham, Hemela Loulseged, Richard Gibbs, and Judith F. Margolin. (2003) High throughput SSH/RT-RQ-PCR coupled to a relational patient database: A genome-wide methodology for identifying and validating molecular markers and assessing their ability to predict specific clinical endpoints in cancer. *Advances in Genome Biology & Technology 2003 proceedings*.
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  106. **Gunaratne, P. H.**, Garcia, A. M., Hale, S., Lu, X., Tsang, Y., Hulyk, S., Gay, L., Walsham, N., Kowis, C., Margolin, J. and Gibbs, A. R. (2001) A high-throughput cDNA sequencing and gene discovery platform using a concatenated cDNA sequencing (CCS) strategy. *Am. J. Hum. Genet.* 69: 219 (51<sup>st</sup> ASHG proceedings abstract #222).
  107. **Gunaratne, P. H.**, Gannavarapu, A., Palmer, S. and Richards, S. C. (1999) Improvement in clinical genetic testing for SCA-7: Development of a Southern to detect extremely large expansions. *Am. J. Hum. Genet.* 65: A299 (49<sup>th</sup> ASHG proceedings abstract #1679).
  108. Palmer, S. E., **Gunaratne, P. H.** and Richards, S. C., Saldivar, R. A. and Kagan-Hallet, K. S. (1999) Extreme anticipation and unusual multisystem phenotype in a family with spinocerebellar ataxia type 7 (SCA7). *Am. J. Hum. Genet.* 65: A69 (49<sup>th</sup> ASHG proceedings abstract #365).
  109. **Gunaratne, P. H.**, Gannavarapu, A., De Vivo D. C. and Richards, S. C. (1999) A paradigm for genetic testing for Friedreich's ataxia: Observation of heteroduplex artifacts, definition of a premutation range and identification of reduced penetrance alleles. *American Academy of Neurology (AAN) proceedings*.
  110. **Gunaratne, P. H.** and Richards, C. S. (1998) A paternally transmitted contraction and an unusual fragment in the mother of a prenatal Friedreich's Ataxia case. *Am. J. Hum. Genet.* 63: A327 (48<sup>th</sup> ASHG proceedings).
  111. **Gunaratne, P. H.** and Richards, C. S. (1997) An ataxia panel for efficient diagnosis of neurodegenerative diseases. *Am. J. Hum. Genet.* 61: A220 (47<sup>th</sup> ASHG proceedings).
  112. Roa, B. B., **Gunaratne, P. H.**, Van den Veyver, I. B. and Richards, C. S. (1997) Improvements in fetal RhD typing by multi-exon analysis through multiplex PCR. *Am. J. Hum. Genet.* 61: A226 (47<sup>th</sup> ASHG proceedings).
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  114. Richards, S. C., Ward, P. A., Roa, B. B., Boyd, A., **Gunaratne, P. H.**, Kuenzli, G., Friedman, L. C. and Plon, S. E. (1996) Population-based genetic testing for the 185delAG BRCA1 mutations in the Ashkenazim. *Am. J. Hum. Genet.* 59: (46<sup>th</sup> ASHG proceedings).
  115. **Gunaratne, P. H.**, Scheuerle, A., E. and Shaffer, L. G. (1995) Spreading of inactivation from the inactive X to chromosome 15 does not extend into the imprinted PWS/AS region in a t (X;15) line. *Am. J. Hum. Genet.* 57: (45<sup>th</sup> ASHG proceedings).
  116. **Gunaratne, P. H.**, Virta-Pearlman, V., Bilyeu, K., Shaffer, L. G. and Chinault, A. C. (1993) Identification of two replication timing domains in the murine *Ada* gene region. *Cold Spring Harbour Symposia for Quantitative Biology (CSHQB) DNA and chromosomes session*: 67.

117. Bilyeu, K., Virta-Pearlman, V., **Gunaratne, P. H.**, and Chinault, A. C. (1993) Functional and temporal analysis of a murine origin of DNA replication. *Cold Spring Harbor Symposia for Quantitative Biology* (CSHQB) Eukaryotic DNA replication session: 20.
118. Virta-Pearlman, V., **Gunaratne, P. H.** and Chinault, A. C. (1992) The use of an amplified murine *Ada* gene region to identify a chromosomal origin of DNA replication. *Cold Spring Harbor Symposia for Quantitative Biology* (CSHQB) Eukaryotic DNA replication session: 198.
119. Herman, G. E., Faust, C. J., Berry, M., **Gunaratne, P. H.**, Virta-Pearlman, V. and Chinault, A. C. (1991) The use of interspersed repetitive sequences (IRS) PCR to generate murine DNA probes to isolate ends from and generate fingerprints from yeast artificial chromosomes (YAC) and cosmid clones. *Am. J. Hum. Genet.* 49: (41<sup>st</sup> ASHG proceedings).
120. **Gunaratne, P. H.**, Weitzman, S. A., Turk, P. W., and Rosen, S. T. (1990) Functional analysis of a putative silencer in the human *C-MYC* oncogene. *American Federation for Cancer Research (AFCR) proceedings*.
121. **Gunaratne, P. H.** and Goldberg, M. L. (1986) *Zeste* is a tissue-specific transcriptional modifier of the *white* locus of *Drosophila melanogaster*. **27<sup>th</sup> Ann. Drosophila Convention.** \*(Selected for Oral Presentation).

#### **A.5. Invited Talks (63 Total)**

1. Southeastern Association of Shared Resources (SEASR), Nashville, TN, June 12-14, 2024.
2. American Society for Cancer Research-Qiagen Symposium, San Diego, CA, April 5-10, 2024  
\*\*Selected-Sakuni Rankothgedera, Graduate Student to present
3. American Society for Cancer Research-Qiagen Symposium, Orlando, FL, April 14-19, 2023  
\*\*Selected-Micah Castillo, Graduate Student to present
4. Illumina User Group Meeting (UGM), Houston TX, May 16, 2023
5. American Society for Human Genetics-Qiagen Symposium – Virtual Talk – October, 2021
6. Baylor-Human Genome Sequencing Center (Baylor-HGSC) Virtual Seminar, March 20, 2021
7. 1st Annual GCC Single Cell Omics Symposium, Houston, TX, October 8, 2020
8. Texas Tech. Obesity Research Cluster Conference, Lubbock, TX, May 09, 2018 (Keynote)
9. Science and Technology for Society Forum Sri Lanka 2016, Keynote Address, Emerging Technologies Sessions, Colombo, Sri Lanka, September 7-10, 2016
10. SciLifeLab, KTH, The Royal Institute of Technology, Experimental Oncology KTH Royal Institute of Technology, Karolinska Institute, Stockholm, Sweden, July 22, 2016
11. Department of Zoology, Keleniya University, Sri Lanka, July 4, 2016
12. Institute of Experimental Biology, Colombo University, Sri Lanka, January 12, 2016.
13. First International Conference on Natural Products Genomics & Drug Discovery, Colombo, Sri Lanka, July 22-24, 2015.
14. 3rd Lowy Symposium – Drug Discovery to Personalised Medicine, Sydney, Australia, May 4-6, 2015.
15. Math Bio Institute (MBI) Ohio State University (OSU), Columbus, Ohio, April 17, 2015
16. College of Human Sciences, Texas Tech, Lubbock Texas, February 5, 2015.
17. UT School of Public Health, Houston, TX, November 17, 2014.
18. University of South Texas, San Marcos, October 3, 2014.
19. UCLA - Johnson Comprehensive Cancer Center, February 10, 2014.
20. Department of Experimental Therapeutics, The University of Texas M. D. Anderson Cancer Center, February 27, 2013.
21. Genomic & RNA Profiling Center, Baylor College of Medicine, February 13, 2013.
22. Canada's Michael Smith Genome Sciences Center, Vancouver, British Columbia. January 25, 2013.
23. Ohio State University (OSU), Biophysics Seminar Series, Columbus Ohio, August 31, 2012

24. Center for RNAi and Non-Coding RNAs MD Anderson Cancer Center Symposium, Houston, TX July 27, 2012.
25. New York University (NYU) Medical School, Langone Medical Center, Department of Microbiology, New York, February 02, 2012.
26. Global Forum for Sri Lankan Scientists, Colombo, Sri Lanka, December 13-15, 2011.  
(Session Chair – Biotechnology)
27. Wayne State University, Michigan, October 24, 2011.
28. Neils Bohr Institute, Copenhagen Denmark, June 15, 2011.
29. American Association for Cancer Research (AACR) Annual Meeting, Harvesting the yield of TCGA Session. Orlando, Florida, April 2, 2011.
30. Lowy Cancer Research Center, University of New South Wales, Sydney, Australia. March 2, 2011.
31. FSANZ (Food Standards of Australia and New Zealand), Canberra, Australia. February 28, 2011.
32. Department of Molecular & Cellular Biology, Baylor College of Medicine. January 20, 2011.
33. US Army Research & Material Command. Nanomaterials & Biomedicine Forum. Frederick, Maryland. August 24, 2010.
34. Sri Lanka Association for the Advancement of Science (SLAAS). August 5, 2010.
35. University of Bologna, Italy, July 4, 2010.
36. Embryonic and Induced Pluripotent Stem (iPS) Cells in Drug Discovery and Safety Assessment. June 9, 2010.
37. University of Chicago. Department of Pediatrics. May 20, 2010.
38. Northwestern University, Lurie Cancer Center. May 19, 2010.
39. American Association for the Advancement of Science. microRNAs in Disease & Development. (Meeting Co-organizer and Session Chair). Bioscience Research Center, Houston, TX. April 8-10, 2010.
40. American Association for the Advancement of Science. Stem Cell Sessions. Bioscience Research Center, Houston, TX. April 8-10, 2010.
41. Molecular Medicine Tri-Conference. iPS Cells: From Screening to Therapy. The Moscone North Convention Center in San Francisco. February 3-4, 2010.
42. Alliance for Nanohealth (ANH) Principle Investigator (PI) Meeting. Houston, February 23, 2010.
43. Lineberger Cancer Center. University of North Carolina at Chapel Hill. January 5, 2010.
44. University of North Carolina at Chapel Hill, Department of Obstetrics & Gynecology (OB/GYN Grand Rounds). January 5, 2010.
45. NCI - National Cancer Institute, Translational Genomics in Neuroblastoma Meeting (TGiN-3), Bethesda, MD. November 12-13, 2009.
46. Dan L. Duncan Cancer Center, Baylor College of Medicine. Houston, TX. October 12th 2009.
47. Baylor College of Medicine, Human Genome Sequencing Center. Houston, TX. October 27, 2009.
48. NCI/NHGRI - The Cancer Genome Atlas Consortium (TCGA) meeting. Berkely, CA. May 19-22, 2009.
49. Sri Lankan Medical Association (SLAMA) Annual Meeting– Plenary Session. March 19, 2009.
50. University of Colombo, Sri Lanka. March 12, 2009.
51. Hongkong University, Dec. 10, 2008.
52. 1st Annual World Congress of Regenerative Medicine & Stem Cell, Guangzhou, China. Embryonic and Fetal Stem Cell Tissue Engineering Session (Session Chair). Dec. 2-4, 2008.
53. 2nd Annual World Congress of Gene, Decoding Life for Human Health, Guangzhou, China. RNA Technologies: siRNA, RNAi, microRNAs, mRNA and Antisense Session. (Session Chair). Dec. 5-7, 2008.
54. American Association for the Advancement of Science (AAAS-SWARM). University of New Mexico. April 10, 2008.
55. American Physical Society (APS). Biological Physics Section. New Orleans, March 13, 2008.

56. UT MD Anderson Cancer Center. Microfluidic Technology Enabling Advances in microRNA Research. April 22, 2008.
57. FORCE-Seminar Department of Molecular & Human Genetics, Baylor College of Medicine. May 2008.
58. Department of Biochemistry, Baylor College of Medicine. 2006.
59. American Chemical Society (ACS-SWARM). Biochip Symposium. 2006.
60. Department of Molecular & Human Genetics, FORCE-Seminar, BCM, January 2007.
61. University of Texas Health Science Center at Houston. February 12, 2007.
62. Feigin Center Pediatric Research Seminar, Texas Children's Hospital. February 21, 2007.
63. Southwest Regional Stem Cell Society, Houston. April 27, 2007.

#### **A.6. Invited Meetings (17 Total)**

1. NCI- NCI Working Group Workshop on Hepatocellular Cancer: New Indications and Directions, presented in collaboration with AACR and AASLD-Washington DC, November 6-7, 2018-11-13  
Session Chair: Animal Models and Molecular Classification of HCC.
2. NC-TCGA Legacy Meeting. Multi-OMICS Studies-Cell Symposia. Washington DC, September 27-29, 2018.
3. Texas Tech – Obesity Research Cluster Conference, Lubbock, TX, May 09, 2018
4. NCI-The Cancer Genome Atlas (TCGA) – Pan Cancer workshop, Houston, TX, November 17-18, 2016. (Leader-Long non-coding RNA analysis working group)
5. NCI-The Cancer Genome Atlas (TCGA) – Pan Cancer workshop, Santa Cruz, CA, February 24-26, 2016. (Leader-Long non-coding RNA analysis working group)
6. George Mason University, Information Security Group, Washington DC – Designing new methods for encrypting genome sequences to protect individuals from insurance and employment discrimination – Spring 2016.
7. First International conference on Natural Products Genomics & Drug Discovery, Colombo, Sri Lanka, July 22-24, 2015.
8. Drug Discovery to Personalised Medicine, Sydney, Australia, May 4-6, 2015.
9. Math Bio Institute – Stem Cells Development & Cancer Meeting, Columbus, Ohio, April 13-17.
10. The National Cancer Institute/National Human Genome Research Institute (NCI/NHGRI) - The Cancer Genome Atlas (TCGA) - Steering Committee Meeting. Washington DC, April 27 2011.
11. American Association for the Advancement of Science Regional Meeting. April 8-10, 2010. Co-organizer.
12. Washington University Genome Center, St. Louis. Cancer Genomics. December 5, 2009.
13. The National Cancer Institute/National Human Genome Research Institute (NCI/NHGRI) - The Cancer Genome Atlas (TCGA) - Steering Committee Meeting. Broad Institute, MIT. November 17-20, 2009.
14. CPRIT- Cancer Prevention Research Institute of Texas – Inauguration/Steering committee Meeting. October 21, 2009.
15. The National Cancer Institute/National Human Genome Research Institute (NCI/NHGRI) - The Cancer Genome Atlas (TCGA) - Steering Committee Meeting. Washington DC, July 8-9 2009.
16. National Cancer Institute (NCI), Circulating Tumor Cells: Emerging Technologies for Detection, Diagnostics and Treatment” NIH-Bethesda, Maryland. September 10-11, 2009.
17. 11th Biennial Symposium on Minorities, the Medically Underserved & Cancer. Washington, D.C. April 2-6, 2008. (Led roundtable discussion and student tour of NIH)

#### **A.7. Research Support**

### **A.6.1. Active Research Support (2 Total)**

1. **Wellcome Leap-Untangling Addiction** 04/30/24-03/31/2027  
Source: Wellcome Leap/UT-Health Science \$753,928 (Total Cost)  
Title: Identifying miRNA signatures of Opioid Misuse Risk in Trauma Patients  
Role on Project: Co-PI
2. **1R01AR081487-01A1 NIH (Kumar)** 04/01/2024-03/31/2028  
Source: NIH/NIAMS  
Title: TWEAK/FN14/UPR Signaling in Skeletal Muscle Wasting  
Role on Project: Co-I
3. **High Priority Area Large Equipment Grant (Gunaratne)** 07/01/2021-06/31/2023  
Source: UH-DOR \$245,000 (Total Direct Cost)  
Title: Advancing the Single Cell Sequencing Platform to Accommodate Solid Tissue and Incorporating Digital PCR for High-Throughput Screening  
Role on Project: Principal Investigator

### **A.6.2. Pending Research Support**

### **A.6.3. Completed Research Support (26 Total)**

4. **R01CA218036 (Yang)** 09/01/2017-08/31/2022  
Source: MD Anderson Cancer Center/NIH-NCI \$100,000 (Total Direct Cost-Gunaratne)  
Title: Combinational Treatment Strategies to Counteract EGFR Resistance  
Role on Project: Co-Investigator
5. **1R01AI137275-01A1 (Mace)** 09/01/2018-08/31/2020  
Source: Columbia University/NIH-NIAID \$77,926 (Total Direct Cost-Gunaratne)  
Title: Determining the Role of The Replicative Helicase In Human NK Cell Development.  
Role on Project: Co-Investigator
6. **NIH/SBIR (Metzker)** 09/01/2019-08/31/2020  
Source: RedVault BioSciences/NIH-SBIR \$48,527 (Total Direct Cost-Gunaratne)  
Title: Solid-Phase Replication of Long Template Libraries for NGS Applications  
Role on Project: Co-Investigator
7. **Minor Research Core Facility Grant (Gunaratne)** 07/01/2017-06/30/2021  
Source: UH-DOR/College of NSM \$500,000 (Total Direct Cost)  
Title: UH-Sequencing and Gene Editing Facility  
Role on Project: PI
8. **High Priority Area Small Equipment Grant (PH Gunaratne)** 07/01/2017-06/31/2021  
Source: UH-DOR \$50,000 (Total Direct Cost)  
Title: UH-Sequencing and Gene Editing Facility  
Role on Project: Principal Investigator
9. **RP180674-C2 (Lopez-Terrada)** 08/31/2018-08/30/2022
10. Source: Baylor College of Medicine/CPRIT/MIRA \$24,804 (Total Direct Costs-Gunaratne)
11. **1R15HL141963-01A1 (McConnell)** 04/01/2019-03/31/2022  
Source: NIH/NHLBI \$33,276 (Total Cost-Gunaratne)  
Title: Gravin Signalosome Protein Coordinates Cardiac Function via Adrenergic Receptor Signaling. Role on Project: Co-PI
12. **NCI-1R01CA194617-01 (K Tsai)** 04/10/2015-03/31/2019  
Source: NIH/NCI  
Title: (PQA4) Molecularly Targeted Chemoprevention for Preneoplastic Squamous Epithelia

- Role on Project: Co-Investigator Gunaratne/Total Cost: \$102,446  
12/22/2017-12/31/2019
13. **CTV** (Gunaratne)  
Source: Chevron Technology Ventures  
Title: Developing New DNA Biomarkers for Oil Potential, Predicting Fracture Heights And Well Connectivity For Oil Industry Applications.  
Role on Project: PI Gunaratne/Total Cost: \$400,000  
04/01/2012-03/31/2017
14. **1R01CA160394-01A1** (ER Flores)  
Source: NIH-NCI  
Title: Roles of p63 in regulation of miRNA and LincRNA targets in metastatic cancer  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$291,569  
01/01/2012-12/31/2014
15. **RP120124** – (ER Flores)  
Source: **CPRIT- Cancer Prevention Research Institute of Texas**  
Title: Investigating the roles of p63 in miRNA regulation in EMT and metastatic breast cancer  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$354,398  
06/01/2014-05/31/2017
16. **NYSTEM** (C. Basilico)  
Source: New York  
Title: Regulatory Networks Determining Sox2 Dependence of Osteosarcoma Stem Cells  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$68,572  
08/1/2013-5/31/2015
17. **1R01GM106069** (C. Williams)  
Source: NIH/NIGMS  
Title: Elucidating The Mechanism Of ER-beta In Colon Carcinogenesis  
Role on Project: Co-Investigator Gunaratne/Total Costs: \$66,470  
01/01/2011-31/12/2013
18. **RP110028** - (Goodell, M –PI)  
Source: CPRIT- Cancer Prevention Research Institute of Texas  
Title: Role of DNA Methyltransferase 3B in normal and malignant hematopoiesis  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$240,000  
01/01/2011 – 31/12/2013
19. **RP110040** - (Donehower, L–PI)  
Source: CPRIT- Cancer Prevention Research Institute of Texas  
Title: Inhibition of the Wip1 oncogenic phosphatase as an anti-cancer  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$187,295  
01/01/2011-31/12/2012
20. **RP110355** - (Gunaratne, PH –PI)  
Source: CPRIT- Cancer Prevention Research Institute of Texas  
Title: siRNA/microRNA-conjugated gold nanoparticle dendrons for sensitizing cancer cells to chemotherapy  
Role on Project: Principal Investigator (PI) Gunaratne/Total Cost: \$199,977  
08/1/2011-03/31/2012
21. **5R01-MH080433-04 NCE** - (RA Gibbs - PI)  
Source: NIH-NIMH  
Title: The Genetic And Genomic Study Of microRNA In Bipolar And Schizophrenia  
Role on Project: Collaborator Gunaratne/Total Cost: \$211,241  
09/30/08/2009/29/2012
22. **1R01HL095382** (DB Corry - PI)  
Source: **NIH-NHLBI**  
Title: Short RNA profiles in Human COPD/Emphysema  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$691,890  
01/01/2011-12/31/2014
23. **1R01GM093110-01A1** - (V Meller - PI)  
Source: **NIH-NIGMS**  
Title: Small RNA and whole chromosome recognition  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$64,887



24. **MMF 104111** (ST Rosen-PI) 01/01/2012-12/31/2012  
Source: Multiple Myeloma Foundation  
Title: Identification of Gene Networks Regulated by Glucocorticoids in Multiple Myeloma  
Role on Project: Co-Investigator Gunaratne/Total Cost: \$28,000
25. **Alliance for Nano Health-UTHSC Pilot Grant** (PH Gunaratne - PI) 09/01/2009-08/31/2011  
Source: USAMRMC BAA08-UTHSC (Mauro Ferrari – PI)  
Title: Integrating Amine-functionalized Gold Nanoparticle Conjugated MicroRNAs into Cancer Prognostic and Therapeutic Strategies Targeted at Drug Resistant Multiple Myeloma  
Role on Project: PI-PILOT GRANT Gunaratne/Total Costs: \$65,000
26. **U54 HD07495-36** - (BW O'Malley - PI) 04/01/2009-03/31/2012  
Source: NIH-NICHD  
Title: MicroRNAs in endometrial function and dysfunction  
Role on Project: Co-Investigator Gunaratne/Total Costs: \$66,000
27. **CF00730-4041-H0104-B2754-NA** 01/01/2011-12/31/2012  
Source: Cullen Foundation  
Title: Establishing a platform for Nanohealth and Genomic Medicine  
Role on Project: PI Gunaratne/Total Costs: \$250,000
28. **H-24193** (MM Matzuk – Multi-PI) 12/31/2007-12/30/2010  
Source: Ovarian Cancer Research Fund  
Title: MicroRNAs as diagnostic and therapeutic targets in ovarian cancer  
Role on Project: Co-Principal Investigator (Co-PI) Gunaratne/Total Costs: \$180,000
29. **Baylor College of Medicine – Pilot Grant** (Gunaratne) 09/30/2009-08/31/2011  
Source: NIGMS- P01 GM081627 (Margaret Goodell – PI)  
Title: Integrating Ronin-regulated microRNAs into Human ES Cell gene networks  
Role on Project: PI- PILOT GRANT Gunaratne/Total Costs: \$85,500

## A.7. Patents

### Inventor/co-inventor

- In Force:** UH ID No. 2021-002 | Attorney Docket No. 2019-058 (T-11416-P): Systems and methods for analytic mapping of the metageomic and hydrocarbon footprints of geologic subzones. UHID 2329-51 (2019-058) Systems and Methods for Analytic Mapping of the Metageomic and Hydrocarbon Footprints of Geologic Subzones. Chevron Corporation.
- Provisional Application:** UH ID No. 2021-002 | Attorney Docket No. 23853-P162V1  
Discovery and use of immunogenic peptides for the treatment and prevention of cancers
- Grant:** U.S. Patent Appl. No. 13/437,251; PCT patent PCT/US2012/31822  
microRNA-130a,b as a tumor suppressor of cancer
- Grant:** U.S. Patent Appl. No. 13/453,553; PCT patent PCT/US2012/34655  
microRNA-140-5p as a tumor suppressor of cancer
- Grant:** U.S. Patent Appl. No. PCT/US2013/9758785  
miR-520 microRNAs sensitize cancers to platinum-based therapy
- U.S. Patent Appl. No. 13/136,498; PCT patent # PCT/US2011/001356  
Interior Functionalized Hyperbranched Dendron-Conjugated Nanoparticles and uses Thereof
- U.S. Patent Appl. No. 13/319,446. CLFR.P0342US  
miRNA Expression in Allergic Disease
- U.S. Patent Appl. No. 13/437,128; PCT patent PCT/US2012/31809  
microRNA-29a,b,c as a sensitizing agent for chemotherapy

9. U.S. Patent Appl. No. 13/501,806; PCT patent PCT/US2012/34655  
microRNA miRNA-31 as a therapeutic approach for the treatment of cancer
10. U.S. Patent Appl. No. PCT patent PCT/US2017/0369884  
MicroRNAs Sensitize Cancers to Therapy

### **A.8. New Company Formation**

- 2019 Co-Founder, CEO and CSO, GeOME Analytics
- 2014 Founder and Chief Scientific Officer (CSO) NEXTmiRNA Technologies (<http://www.nextmirna.com/>)

### **A.9. National Consortia**

- NCI – TCGA PanCancer Consortium – 2016-2019
- Leader Long non-coding RNA Group
- NCI/NHGRI –The Cancer Genome Atlas (TCGA) Consortium 2009-present
- Leader microRNA Analysis Groups – Ovarian, Colorectal, Kidney cancers
- NHGRI – Marmoset Genome Consortium – 2010-2013
- Leader microRNA Analysis Group
- NHGRI – Zebrafish Genome Consortium 2009
- Leader microRNA Analysis Group
- NIDDK – Stem Cell Genome Anatomy Project (SCGAP) Consortium 2003-2005
- NHGRI/NCI – Mammalian Gene Collection (MGC) Consortium 2002-2005
- Leader Baylor Human Genome Sequencing Center-Gene sequencing Group
  - Led Baylor Team to make the largest single contribution to the NCI-Mammalian Gene Collection in Phase I
- NHGRI –The International Human Genome Project Consortium 1999-2003
- Human Chromosomes 3, 12 and X

### **A.10. Editorial Boards**

- 2011-2019 Review Editor, Frontiers in Non-coding RNA Journal

### **A.11. Manuscript Review**

Nature Reviews, Nature Protocols, Proc. Natl. Acad. Sci. (PNAS), PLoS Genetics, Molecular Cell, Genome Research, Cancer Research, Clinical Cancer Research, Oncotarget, Nucleic Acids Research, PLoS ONE, BMC Genomics, BMC Bioinformatics, Briefings in Bioinformatics, British Journal of Cancer, Genome Biology, Molecular Carcinogenesis, Molecular Cancer Therapeutics, Frontiers in Non-coding RNA, Genomics, Genome Medicine, Gene Expression Patterns (GEP), Elsevier, Cell Research, Toxicology & Applied Pharmacology (TAAP), Journal of Theoretical Biology, Pancreas Journal

### **A.12. Expert Peer Reviewer – Grants & Programs**

- 2024 NCI-ZCA1 TCRB-9 (M1) R: Early-Stage Development of Informatics Technologies for Cancer Research and Management (U01 Clinical Trial Optional)
- 2021/2024 Department of Defense (DOD) - Kidney Cancer Research Program (KCRP)
- 2024 Oak Ridge Associated Universities (ORAU)
- 2020-2023 KTH (Royal Institute of Technology in Stockholm), Sweden RAE-2020-2023
- 2020-2023 Research Foundation Flanders (FWO), Belgium

2020-2021	Department of Defense (DOD) – Peer Reviewed Medical Research Program (PRMRP)
2015, 2021	Swiss National Science Foundation (SNF)
2017-2023	Florida Department of Health (F-DOH)
2020	Department of Defense (DOD) Peer Reviewed Medical Research Program (PRMRP) COVID-T-2
2020	Department of Defense (DOD) Breast Cancer Research Program – Nanotechnology Panel (BCRP-NT)
2017-2019	Pennsylvania Department of Health (PA-DOH)
2017-2018	Expert Peer Review U.S. FDA Research Program
2016	NCI-2016/05 ZCA1 SRB-J (M2) R–Special Emphasis Panel/Scientific Review Group Provocative Question 6, “What are the underlying molecular mechanisms that are responsible for the functional differences between benign proliferative diseases and premalignant states”
2015	NCI-ZCA1 SRB-J (M2) S–Special Emphasis Panel/Scientific Review Group Pennsylvania Department of Health (PA DOH) Scientific Review Group
2011/2012	NIH-ZRG1GGG-H30S–Special Emphasis Panel/Scientific Review Group NIH-ZRG1 GGG-H31S – High-end Instrumentation Grants NHMRC-National Health and Medical Research Council- Australia
2012	Duncan Family Institute (DFI) Seed Funding Research Program
2011	Czech Science Foundation
2011	Netherlands-Research Foundation Flanders (FWO)
2010	NIH – CNIHR – Ad Hoc Cancer Research UK
2009-2010	US-Israel Binational Science Foundation
2010	Israel Science Foundation

### **A.13. Colloquia & Meeting Organization**

#### **Symposium co-organizer**

April 2010 - American Association for the Advancement of Science (AAAS) regional meetings. Houston, TX.  
2008 - Colloquium: Modeling and Analysis of Biological Networks (Transcriptional, Signaling, Metabolic), Houston, TX.

#### **Session chair**

April 2010 - AAAS - MicroRNAs in Disease & Development (Houston, TX)  
2008 – 1st Annual World Congress of Regenerative Medicine & Stem Cell, Guangzhou, China. Embryonic and Fetal Stem Cell Tissue Engineering Session  
2008 – 2nd Annual World Congress of Gene, Decoding Life for Human Health, Guangzhou, China. RNA Technologies: siRNA, RNAi, microRNAs, mRNA and Antisense Session  
2001 – ASHG (American Society for Human Genetics Proceedings) Gene Expression & Genomics – SanDiego.

### **A.14. Dual Appointments**

2019-Present	Department of Molecular & Cellular Biology, Baylor College of Medicine
2006-Present	Human Genome Sequencing Center, Baylor College of Medicine
2006-2019	Department of Pathology, Human Genome Sequencing Center, Baylor College of Medicine

### **A.15. External Advisory Committees and Panels**

2014–Present	MD Anderson Cancer Center – Ovarian Cancer SPORE – Liason for University of Houston
2010–Present	Genomic & RNA Profiling Core Advisory Committee, Baylor College of Medicine, Houston

2013–2014	AAAS-SWARM Executive Committee
2012	National Health and Medical Research Council (NHMRC) Australia, Translation Faculty
2010/2011	Peer reviewer of University programs - University of Padua
2011	Elkins Pancreas Center - Baylor College of Medicine, Strategic Planning Retreat
2010	Human Genome Sequencing Center, Baylor College of Medicine, Strategic Planning Retreat
2010	Huffington Center on Ageing – Baylor College of Medicine, Strategic Planning Retreat

### **A.15. Professional and other Memberships**

1999-2009	American College of Medical Genetics – Fellow
2009-Present	Dan L. Duncan Cancer Center – Member

## **B. TEACHING**

### **B.1. Courses Taught**

2020-Present	Biomedical & Industrial Applications of Genomics (BCHS 6297/6397-Special Topics Course), UH
2013-Present	Nucleic Acids & Human Disease (BCHS 4397–Special Topics Course), UH
2008-Present	Nucleic Acid Biochemistry (BCHS 4306), UH A core 3-credit hour course for seniors and undergraduate UH Biology and Biochemistry Majors.
2013-2014	Bioinformatics and Genomic Analysis course, Baylor College of Medicine microRNA section - (705-459J, 320-459J/310-459J)
2009-2011	Genome Biology & Next Generation Technologies (Biol6297 – Special Topics Course), UH
2008	Non-coding RNA & RNA Interference (Biol6297 – Special Topics Course), UH A 2-credit hour course for graduate students covering topics on the emerging field of non-coding RNAs & RNA Interference (New course).
2004-2007	Introduction to the Principle of Genetics (Biol3301), UH A core 3-credit hour course for juniors and undergraduate UH Biology Majors. Average class size - 250 students.
2005	Introductory Biology (Biol1432), UH A core 4-credit hour course for freshman and undergraduate UH Biology Majors. Class size 400 students.
1989	Bacterial Genetics, Medical Board Review, Rush University, Chicago, IL
1984	Molecular Evolution, Teaching Assistant, Cornell University
1982-1984	Genetics 281, Teaching Assistant, Cornell University.

### **B.2. Trainees**

#### **Faculty**

2019-2022	Kimberly Holloway, Ph.D. (UH-Sequencing Core – Project Manager) <ul style="list-style-type: none"> <li>• Associate Director, Translational Oncology, Iterion Therapeutics</li> </ul>
2019-2021	Jignesh Chandana, M.S. (UH-Sequencing Core - Automation/Clinical Sequencing Specialist) <ul style="list-style-type: none"> <li>• Lead Lab Automation Developer-Invitae</li> </ul>
2016–2018	Sujash Chaterjee, Ph.D. (Research Assistant Professor)

- Lead-Product Marketing and Commercialization, Genomics, NA at QIAGEN
- Global Cancer Research Lead, Illumina
- 2017 Navin Rustagi, Ph.D. (Research Assistant Professor)
- Data Scientist at McKinsey & Company
- 2015–2016 Utpal Pandya, Ph.D. (Research Assistant Professor)
- 2011–2013 Weiming Xiao, Ph.D. (Research Assistant Professor)
- Co-founder and Chief Scientist at Shenzhen Lucky Source Investment Management Corporation.

### **Postdoctoral**

- 2023-Present Nuwan Acharige, Ph.D  
(UH-Sequencing Core, Lead-16S-Sequencing)
- 2022-2023 Partha Bhagavatula, Ph.D.  
(UH-Sequencing Core, Senior Data Analyst)
- 2013–2018 Yinghong Pan, Ph.D. (Research Associate)
  - Project Manager, Genome Center  
University of Pittsburgh Medical College (UPMC)
  - Sr. Application Scientist at PerkinElmer, Inc.
- 2009–2013 Lalithya Jayarathne, Ph.D. (Research Associate)
- 2007 Rafal Drabek, Ph.D. (Postdoctoral Fellow)

### **Graduate Students**

- 2020-Present Micah Castillo, Ph.D. Candidate, Biochemistry
- 2019-Present Sakuni Rankothgedera, Ph.D. Candidate, Biochemistry
- 2021-Present Aaranya Kandasamy, Ph.D. Candidate, Biochemistry
- 2021-Present Shiyanth Thevasagayampillai, Ph.D. Candidate, Biochemistry
- 2021-Present Dilshan Adhikari, Ph.D. Candidate, Biochemistry
- 2016–2020 Asha Palat: Ph.D. Candidate, Molecular & Cellular Biology  
McCammom Fellowship 2019  
Technical Support Scientist, Novogene America
- Post Doctoral Fellow, UH-Sequencing Core, Houston, TX
- Brandon Mistretta, Ph.D. Candidate, Biochemistry  
McCammom Fellowship 2020
- Field Application Scientist, 10X Genomics
- 2016–2019 Jason Hoggard, Ph.D. Candidate, Biochemistry  
McCammom Fellowship, 2018
- Post Doctoral Fellow, Human Genome Sequencing Center, Baylor College of Medicine, Houston, TX
- Postdoctoral Research Fellow, Division of Congenital Heart Surgery, Texas Children’s Hospital, Houston, TX
- 2012–2017 Ian Wilson. M.Sc. Candidate, Biochemistry  
M.Sc. (2020)
- Sagar Patil: Ph.D. Candidate, Biochemistry  
Harwood Fellowship 2016
- Postdoctoral Fellow, Columbia University, New York, NY
- Lead Researcher at St. Jude Children's Research Hospital
- Project Manager, GlaxoSmithKline (GSK) -Philadelphia
- 2012–2017 Johnson Hoang: Ph.D Candidate, Biochemistry
- Ph.D., SCYM (ASCP),

- 2009–2014 Anadulce Hernandez-Herrera, Ph.D. Biochemistry (Contactyn-Fellowship)
- Lester and Sue Smith Breast Center, Biobank Research Coordinator, Baylor College of Medicine – 2017
  - Clinical Trials Team, UCSF, San Francisco, CA; Breast Center
- 2008–2012 Rajib Ghosh, Ph.D. Molecular & Cellular Biology
- Post Doctoral Fellow – Johns Hopkins University, MD
  - Research Assistant Professor, University of West Virginia, VA
  - Senior Scientist at Abcam
  - Principal Scientist, Bristol Myers Squibb
- 2007–2011 Jayantha Tennakoon, Ph.D. Molecular & Cellular Biology
- Healthcare Consulting Firm, Chicago, IL
- 2007–2011 Ashley Benham-Duret, Ph.D. Biochemistry
- Post Doctoral Fellow – Texas Heart Institute, Houston
  - Senior Scientist, 10X Genomics
  - Sales Executive II
- 2007–2008 Arash Naghavi-M.Sc., Molecular & Cellular Biology
- MD program UTMB, Radiology Fellow-Moffitt Cancer Center, Radiation Oncologist, FL

### **Undergraduate Students**

- 2016-2017 Alondra Uribe – Baylor College of Medicine-Internship
- 2015 Radhini Abesekera – Baylor College of Medicine, MD program 2016 (2014, SURF Award), Honors College UH  
Kaiser Tin – Honors College, UH
- 2014 Vicky Hua - University of Texas Health Science Center at San Antonio School of Dentistry
- 2014 Helen Mata – Diagnostic Genetics Master program at UT MD Anderson
- 2014 Marcus Philips, Natasha De La Rosa
- 2013-2014 Suddad Kazazz – 2015, Baylor College of Medicine, MD program (2014, PURS Award, 2014 British-American Foundation of Texas Award)
- 2012-2014 Grace Kang – Memorial Herman Hospital
- 2011 Patricia Akinfenwa – Baylor College of Medicine Translational Biology, Ph.D. Program
- 2009-2012 Jeremy Scott Moncrieff – UT SouthWestern Medical School, (2012, SURF award, Winner-Presentation)
- 2009-2012 Maria Villegas – (2012 – PURS Award)
- 2010 David Hoang – UT SouthWestern, MD Program (Winner 2012, SURF award)
- 2009 Jad El Daye – UT SouthWestern MD Program (2009, PURS award)
- 2008 Arash Naghavi – UTMB MD Program (Radiology Fellow – Moffitt Cancer Center)  
Michael Fountain – Baylor Translational Biology, Ph.D Program (Ph.D Translational Biology 2015)
- 2007 Alex Garbino – Baylor MD/Ph.D program
- 2006 Mahjabeen Khan – Winner - SURF Award, 2007  
Arman Jahangiri – UT Southwestern, MD Program, Undergraduate Honors Thesis

### **Graduate Students – Completed Ph.D. (11)**

1. 2020-2023 Micah Castillo, Ph.D. Biochemistry  
**Dissertation Title:** *Discovery of Immunogenic Neopeptides from Actionable Chimeric RNAs to Develop Vaccines for Lung Cancer Treatment*  
 Field Application Specialist (FAS) 10X Genomics
2. 2017-2020 Asha Palat, Ph.D. Molecular & Cell Biology  
**Dissertation Title:** *microRNA-509-3p Intercepts Metabolic Reprogramming by Targeting Multiple Driver Genes of Glycolysis and Glutaminolysis to Sensitize Ovarian Tumors to Chemotherapy*  
 Technical Support Scientist, Novogene America
3. 2017-2020 Brandon J. Mistretta, Ph.D. Biochemistry  
**Dissertation Title:** *Discovering Novel RNA Regions to Develop Biomarkers and Therapeutic Opportunities for Breast Cancer & SARS-CoV2*  
 Field Application Specialist (FAS) 10X Genomics
4. 2016-2019 Jason Hoggard, Ph.D. Biochemistry  
**Dissertation Title:** *Discovering Pathogenic Variants Associated with Tricuspid Atresia through Whole Exome Sequencing*  
 Post-Doctoral Fellow, Human Genome Sequencing Center, Baylor College of Medicine  
 Post-Doctoral Fellow, Department of Surgery, Texas Children's Hospital
5. 2016-2018 Johnson Hoang, Ph.D. Biochemistry  
**Dissertation Title:** *Mixed Quarternary-Ammonium-coated Gold Nanoparticles for Delivery of MicroRNA*
6. 2012-2017 Sagar Patil, Ph.D. Biochemistry
  - **Dissertation Title:** *Developing microRNA-509-3p as an inhibitor of metastatic progression and cisplatin sensitizer for osteosarcoma"*
  - Senior Research Technologist at St. Jude Children's Research Hospital
  - Post-Doctoral Fellow, Department of Pediatrics-Allergy & Immunology, Texas Children's Hospital
  - Post-Doctoral Fellow, Department of Pediatrics-Columbia University
7. 2009-2014 Anadulce Hernandez-Herrera, Ph.D. Biochemistry
  - **Dissertation Title:** *A genome-wide search for tumor suppressor microRNAs in ovarian cancer*
  - Present – Biobank Research Coordinator, Lester & Sue Smith Breast Center, Baylor College of Medicine
  - 2015-2016 Clinical Trials Team, University of California San Francisco (UCSF), CA
  - 2014-2015 MD-Anderson Cancer Center, Houston, TX
8. 2008-2013 Jayantha Tennakoon, Ph.D. Molecular & Cellular Biology
  - **Dissertation Title:** *Impact of Dicer on the Embryonic Stem Cell Epigenome and Androgen Mediated AMPK-PGC1 $\alpha$  Signaling in Prostate Cancer.* (Co-mentored with Dr. Dan Frigo – Center for Nuclear Receptors & Cell Signaling)
  - Present – Health Care Consulting Company – Chicago, IL
9. 2008-2012 Rajib Ghosh, Ph.D. Molecular & Cellular Biology
  - **Dissertation Title:** *Redefining tumor suppressor microRNAs: functional complexities & nanoparticle mediated delivery*
  - Postdoctoral Fellow – Johns Hopkins University, Baltimore, MD
  - Research Assistant professor, University of Virginia, VA
  - Scientist, Abcam
10. 2007-2011 Ashley Benham, Ph.D. Biochemistry
  - **Dissertation Title:** *MicroRNA: Discovery Family Dynamics and Functional Implications*
  - Postdoctoral Fellow – Texas Heart Institute, Houston, TX
  - Field Application Specialist 10X Genomics
11. 2008-2010 Huifeng Zhu, Ph.D. Physics – Completed May 2010

**Dissertation Title:** *MicroRNA Bioinformatic Analysis and Pattern Formation in Drosophila* (Co-mentored with Dr. Gemunu Gunaratne-Physics)

## C. SERVICE

### C.1. Department, College and University

#### C.1. Departmental Committees

2021	Faculty Search Committee, Nuclear Receptor & Cell Signaling, UH
2020	Faculty Search Committee, Computational Biology, UH
2017	Faculty Search Committee, Electrical & Computer Engineering, UH
2016	Faculty Search Committee, Nuclear Receptor & Cell Signaling, UH
2014-2015	Faculty Search Committee – Quantitative Biology, Biochemistry, UH
2012-2015	Graduate Recruitment & Admissions Committee, Biology & Biochemistry, UH
2008–2010	Faculty Search Committees – Center for Nuclear Receptors/Cell Signaling, UH
2006–2010	Graduate Recruitment & Admissions Committee, Biology & Biochemistry, UH
2005–2007	Faculty Search Committees – Cell & Molecular Biology, UH
2005–2007	Faculty Search Committees – Neuroscience, Biology & Biochemistry, UH

#### C.2. College & University Committees

2020-Present	Scientific Advisory Board, HEALTH Center for Addictions Research and Cancer Prevention
2019-Present	Moore’s Professorship Selection Committee
2018-2019	Executive Board, Data Science Institute (DSI), University of Houston
2015-Present	Director, Next Generation Sequencing Core, UH <a href="http://seqnedit.nsm.uh.edu/">http://seqnedit.nsm.uh.edu/</a>
2014-2019	UH-ADVANCE ADVOCATE
2013-2014	Search committee for Dean of Natural Science & Mathematics (NSM), UH
2014-Present	Executive Committee – UH Next Generation Sequencing Center
2012-2013	Honorary Degree Committee, Provost Office, UH
2011–2012	NSM Biotech Incubator Committee (NSM), UH
2010	Search committee for Dean of Natural Science & Mathematics (NSM), UH
2008–2012	Executive Committee - Institute for Molecular Design (IMD) Sequencing Center
2007–2009	Faculty Advisor - Minority Association of Pre-medical Students
2007–2010	Faculty Sponsor - Collegiate Cancer Council- UH Chapter (Student-run cancer awareness and health disparities organization serving the medically underserved population in Houston)

#### C.3. Outreach programs

2008–2009	Hosted McNair Foundation Scholar from SUNY, New York
2006–Present	Hosted 6 SURF scholars – University of Houston
2008–Present	Hosted 3 PURS scholars – University of Houston
2008–2021	Hosted 70 High School Interns (60 USAEOP/REAP scholars)

#### REAP/USAEOP - Department of Defense /Research and Engineering Apprenticeship Program

2008-2022 – 68 Interns – \$210K

2-interns (2008), 2-interns (2009), 5-interns (2010), 4-interns (2011) 7-interns (2012), 7-interns (2013), 5-interns (2014), 2-interns (2015), 2-interns (2016), 4-interns (2017), 4-interns (2018), 7-interns (2019), 5-interns (2020), 8-interns (2021), 4-interns (2022)



## Schools & School Districts

1. Dulles MSA High School internship
2. Clemens High School
3. Bellaire High School, Houston, HISD
4. Michael DeBaKey High School for Health Professionals, HISD
5. High School for Performing & Visual Arts, HISD
6. Clear Lake High School, CISD
7. Conroe High School, Conroe, TX
8. Margaret Long Wisdom High School, Houston, TX
9. Cristo Rey Jesuit College Preparatory of Houston, Houston, TX
10. Harmony Science Academy Houston High, Houston,
11. Macarthur Ninth Grade School, Houston, TX
12. Lawrence E Elkins High School, Sugarland, TX
13. William P Clements High School, Sugarland, TX
14. John Foster Dulles High School Math and Science Academy, Sugarland, TX
15. Woodlands High School, Woodlands, TX
16. Tompkins High School, Katy, TX
17. Kipp Academy, Houston, TX
18. Shadowcreek High School, Pearland ISD, Houston, TX

Fatma Tanis and Rebecca Abrams (Harmony Academy – (HISD))

- Intel Science and Engineering Fair (ISEF) 2009 – 3rd place Texas State

Pooja Prasad (Bellaire High School – Houston Independent School District)

- Undergraduate – Rice U
- Intel Science and Engineering Fair (ISEF) 2012 – 2<sup>nd</sup> place, Houston District and 3<sup>rd</sup> place Texas State
- American Gastroenterology Association (AGA) Fellowship

Siddharth Reddy (Phillip's Exeter)

- B.Sc. - Cornell University
- Ph.D. Program – Department of Computer Science, Berkely (Laboratory of Sergey Levine and Anca Dragan - Developing machine learning to improve human-robot collaboration)
- ISWEEP – Winner 2012

Shanika Silva (Clear Lake High School, CISD)

- 1st place at Friendswood High School Science Fair in mathematics
- 2013 Galveston County Science Fair in mathematics – 1st place
- 2013 Houston Science and Engineering Fair in Mathematics – 3rd place
- 2013 Exxon Mobile Texas Science and Engineering Fair in Mathematics – 3rd place
- 2013 Council of Texas Statisticians – 1st place
- 2014 Senior Division, American Statistical Association – 1st place

Chathuri Wickramaratne (John Foster Dulles High School, HISD)

- 2014 John Foster Dulles High School Math and Science Academy "Best in Show" Award

Radhini Abeyasekera (Clear Lake High School, Clear Lake ISD)

- 2016 – Medical School, UTHSC Medical School

Melanie Rodrigo (Clear Lake High School, Clear Lake ISD)

- 2016 – Medical School, UTMB
- 2020 – Residency, Neurology, Washington University Medical School

Abhinav Vadassery (Clements High School, Sugar Land, ISD)

- 2019 – Winner, Houston District Science Fair