

Navin Varadarajan

University of Houston
Dept. of Chemical & Biomolecular Engineering
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EDUCATION

- 2008-2010 **Postdoctoral fellow, Chemical Engineering**
Massachusetts Institute of Technology
- 2006-2008 **Postdoctoral fellow, Chemical Engineering**
University of Texas, Austin
- 2001-2006 **Ph.D. Chemistry & Biochemistry**
University of Texas, Austin
Dissertation: Engineering highly active and specific protease variants
- 1998-2001 **M.S. Chemistry**
Indian Institute of Science, India
Thesis: One-Pot Synthesis of Chiral Disulfides & Diselenides from α -Amino Acids Mediated by Ammonium Tetrathiomolybdate in Water
- 1995-1998 **B.Sc. Chemistry**
University of Madras, India

PROFESSIONAL APPOINTMENTS

- 2019- M.D. Anderson Associate Professor of Chemical & Biomolecular Engineering, University of Houston, Houston TX.
- 2016- Associate Professor, Department of Chemical & Biomolecular Engineering, University of Houston, Houston TX.
- 2016- Adjunct member, Dan L Duncan Cancer Center, Baylor College of Medicine, Houston, TX.
- 2010- 2016 Assistant Professor (Tenure-track), Department of Chemical & Biomolecular Engineering, University of Houston, Houston TX.

AWARDS AND HONORS

- 2018 Mentor, Innovation Labs: Mathematical Challenges of Single Cell Dynamics
- 2018 Cullen College of Engineering Teaching Excellence Award
- 2017 CDMRP Peer Reviewed Cancer Career Award
- 2017 Melanoma Research Alliance Established Investigator Award
- 2013 Melanoma Research Alliance Stewart-Rahr Young Investigator Award
- 2014 Cullen College of Engineering Outstanding Researcher Award
- 2013 Cullen College of Engineering Outstanding Teacher Award
- 2013 Invited participant DoD Future Directions in Chemical and Bioengineering Workshop

AFFILIATIONS

2009-	American Institute of Chemical Engineers
2012-	American Association for Cancer Research
2012-2013	American Society for Biochemistry and Molecular Biology
2013-2014	American Association of Immunologists
2013-	Society for Immunotherapy of Cancer
2015	American Society of Hematology

COURSES TAUGHT

Fall 2010-2016, Spring 2014, 2017-2019	CHEE4366/CHE6360/BIOE4366	Introduction to Biomolecular Engineering
Spring 2012, Spring 2015, Fall 2017	CHEE3466	Biological & Physical Chemistry
Spring 2013, Spring 2016 and 2017	CHEE 6397	Biochemical Engineering

UNDERGRADUATE RESEARCH MENTORING

<u>Name</u>	<u>Year</u>	<u>Fellowship</u>
Timothy Henderson	Summer 2011	NSF-REU
Tracy Ngu	Summer 2011	SURF
Soumilli Chatterjee	Fall 2011	PURS
Adeline Mah	Summer 2012-2013	SURF
MyLinh Nguyen	Fall 2012-2013	
Brandon Foley	Summer 2013	NSF-REU
Fatoumatta Dibba	Spring 2014	
Justin Joseph	Spring 2014	PURS
Jennifer Lu	Summer 2014	NSF-REU
Zuan-Fu Lim	Fall 2014-2015	Honors thesis
Evan Manuel	Spring 2017	PURS
Zheng You	Summer 2018 and Summer 2019	

RESEARCH SUPPORT

Total funding over career: \$20,472,670 (\$9,039,554 directly to PI)

ACTIVE

U01AI148118 (MPI: Varadarajan)	12/19/2019 – 11/30/2024 (\$2,322,000)	1.0 academic
NIH (NIAID)	(NV: \$765,000)	
<i>Systematic, molecular level analysis of the Fc receptor ligation on antibody effector functions</i>		
To correlate Fc gamma receptor binding affinity to immune cell activation and function		
RP180466 (PI: Varadarajan)	03/01/2018-02/28/2021 (\$1,173,420)	3.0 academic
Cancer Prevention and Research Institute of Texas		

*Integrated single-cell biomarkers of T-cell efficacy (renewal of RP130570)*To identify biomarkers of CAR⁺ T cells obtained from treated patients.

509800 (PI: Varadarajan) 05/15/2017-05/14/2020 1.0 summer
 Melanoma Research Alliance (\$375,000)
 Established Investigator Award

Single-cell biomarkers for engineering T-cell function and metabolism

To identify biomarkers of T cell function and metabolism

PI: Varadarajan 07/01/2017-06/30/2020 1.0 academic
 Owens Foundation (\$100,000)

Immunomodulation of triple negative breast cancers by enzymatic depletion of adenosine

To investigate the utility of enzymatic depletion of adenosine as a therapeutic strategy

CA160591 (PI: Varadarajan) 10/01/2017-11/30/2020 1.0 academic
 CDMRP Cancer Career Award (\$531,700)

Balancing T-Cell Function and Metabolism for Immunotherapy

Implementation of a new molecular sensor for tracking dynamic T cell metabolism

1705464 (PI: Varadarajan) 09/01/2017-08/31/2020 1.0 academic
 NSF (\$509,523)

*Biomanufacturing next generation T cells*Understanding the impact of nutrient starvation on CAR⁺ T cell function and efficacy.

RP180674 (PI: Dolores Lopez-Terrada) 09/01/2018-08/31/2022 1.0 academic
 (\$5,982,208)

Cancer Prevention and Research Institute (\$520,000: NV)
 of Texas (co-PI: Varadarajan)

Predictive Biomarkers and Novel Therapies for High-Risk Pediatric Liver Cancers

Determining the efficacy of GPC-3 specific CAR T cells.

PI: Andras Heczey 09/01/2018-08/31/2022 0.2 academic
 (\$600,000)

Jimmy V foundation (co-PI: (\$81,000: NV)
 Varadarajan)

Genomic and functional characterization of CAR T cells in children with liver cancer

Determining the efficacy of GPC-3 specific CAR T cells.

RP190579 (PI: Shevkoplyas) 09/01/2019-08/31/2021 0.5 academic
 (\$200,000)

Cancer Prevention and Research Institute (\$60,000: NV)
 of Texas (co-PI: Varadarajan)

Novel High-Throughput Microfluidic Device for Isolating T Cells Directly From Whole Blood to Simplify Manufacturing of Cellular Therapies

Microfluidic isolation of immune cells from whole blood

RP190160 (PI: Malcom Brenner) 03/01/2019-02/28/2023 0.2 academic
 (\$2,400,000)

Cancer Prevention and Research Institute (\$307,764: NV)
 of Texas (co-PI: Varadarajan)

Interleukin-15 and -21 armored glypican-3-specific CAR T cells for patients with hepatocellular carcinoma

Determining the efficacy of GPC-3 specific CAR T cells.

CellChorus (Sponsored research) 07/01/2019-09/01/2020 0.0 academic
(\$130,000)

Investigating the efficacy of CAR T cells

COMPLETED

5U54AI057156-08 (PI: Walker) 03/01/2011-02/28/2013 1.0 summer
NIH/NIAID (\$362,000)

Western Regional Center of Excellence for Biodefense and Emerging Infectious Diseases Research (WRCE)

Subproject: RP003 Project leader

Quantitative mapping of CD8+ T-cell responses during chikungunya vaccination

The objective of the proposal is to enable the quantitative mapping of the breadth and the functionality of CD8+ T-cell responses elicited in response to CHIK vaccination in *M. fascicularis* using a novel high-throughput assay

University of Houston (PI: Varadarajan) 01/01/2011-08/31/2011 (\$6,000)

Isolation of autoreactive antibodies in rheumatoid arthritis

E-1774 (PI: Varadarajan) 06/01/2011-05/31/2014 0.0
Welch Foundation (\$170,000)

Engineering chymotrypsin to selectively cleave after phosphotyrosine

The objective of the proposal is to engineer the substrate specificity of chymotrypsin to recognize the post-translationally modified amino acid, phosphotyrosine by employing a novel flow-cytometric surface display assay

272833 (PI: Varadarajan) 05/01/2013-04/30/2016 0.0
Melanoma Research Alliance (\$225,000)

Stewart-Rahr Young Investigator Award

Quantitative single-cell biomarkers of melanoma immunotherapy

The objective of this proposal is to improve adoptive cell therapy for the treatment of melanoma

RP120241 (PI: Cooper) 12/01/2011-11/30/2014 0.25 summer
Cancer Prevention and Research (\$97,000) Co-Investigator

Institute of Texas

T-Cell Therapy after Hematopoietic Stem Cell Transplantation

To generate tumor-specific T cells for infusion in clinical trials

PI: Cooper 07/01/2013-06/30/2015 0.25
Alex's Lemonade Stand Foundation (\$200,000) Co-Investigator

Pre-Clinical Testing of T cells Coded with CARs for DIPG

RP130570 (PI: Varadarajan) 12/01/2012-05/31/2018 3.0 summer
Cancer Prevention and Research (\$1,279,584)

Institute of Texas

Single-cell biomarkers of clinical-grade T Cells and NK cells to optimize tumor immunotherapy

1R01CA174385 (PI: Varadarajan) 09/01/2012-06/30/2018 3.0 summer
NIH/NCI/NIBIB/OD (\$2,152,563)

Quantitative single-cell biomarkers of T-cells to optimize tumor immunotherapy

PUBLICATIONS

The PDF versions of all published manuscripts can be found at: <http://singlecell.chee.uh.edu/Pubs.html>

1. Mobiny A, Lu H, Nguyen HV, Roysam, B, and Varadarajan N (2020) Automated Classification of Apoptosis in Phase Contrast Microscopy Using Capsule Network [IEEE Trans Medical Imaging](#) 39(1):1-10.
2. Ramesh B, Abnoui S, Mali S, Moree WJ, Patil U, Bark SJ, Varadarajan N (2019) Engineered chymotrypsin for mass-spectrometry based detection of protein glycosylation [ACS Chemical Biology](#) 14(12):2616-2628.
3. Yuan P, Rezvan A, Li X, Varadarajan N and Nguyen HV (2019) Phasetime: A Deep Learning Approach to Detect Nuclei in Time lapse Phase Images [J Clinical Medicine](#) Aug 2; 8(8) pii: E1159.
4. Soundararajan R, Fradette JJ, Konen JM, Moulder S, Zhang X, Gibbons DL, Varadarajan N, Wistuba I, Tripathy D, Bernatchez C, Byers LA, Chang JT, Contreras A, Lim B, Cuentas ERP, Roarty EB, Wang J, Yang F, Barton MC, Rosen JM, and Mani SA (2019) Targeting the interplay between epithelial-to-mesenchymal-transition and the immune system for effective immunotherapy [Cancers](#) May 24; 11(5). pii: E714.
5. Varadarajan N, and Mohan C (2019) Unraveling the molecular circuitry within autoimmune end-organs using single cell profiling technologies [Nature Immunol](#) 20(7):777-778.
6. Yankaskas CL, Thompson KN, Paul CD, Vitolo MI, Mistriotis P, Mahendra A, Bajpai V, Shea DJ, Manto KM, Chai A, Varadarajan N, Kontrogianni-Konstantopoulos A, Martin SS, and Konstantopoulos K (2019). Development of a Microfluidic Invasion Network Device (MIND) for Diagnosis and Precision Care in Breast Cancer [Nature Biomed Engineering](#) 3(6):452-465.
7. Lu H, Li J, Martinez-Paniagua MA, Bandey I, Amritkar A, Singh H, Mayerich D, Varadarajan N, and Roysam B (2019). TIMING 2.0: High-throughput single-cell profiling of dynamic cell-cell interactions by time-lapse imaging microscopy in nanowell grids [Bioinformatics](#) 35(4):706-708.
8. Mahendra A, Yang X, Abnoui S, Park D, Soomro S, Adolacion JRT, Roszik J, Coarfa C, Romain G, Wanzeck K, S. Louis Bridges Jr., Aggarwal A, Qiu P, Agarwal SK, Mohan C, Varadarajan N. (2019) Beyond autoantibodies: Biological roles of human autoreactive B cells in rheumatoid arthritis revealed by whole transcriptome profiling [Arthritis Rheum](#) 71(4):529-541.
9. An X, and Varadarajan N (2018) Single-cell technologies for profiling T cells to enable monitoring of immunotherapies [Curr Opin Chem Eng](#). 10.1016/j.coche.2018.01.003.
10. Liadi I, Romain G, Singh H, Roysam B, Cooper LJN, Varadarajan N. (2018) Defining potency of CAR⁺ T cells: Fast and Furious or Slow and Steady [OncoImmunology](#) doi: 10.1080/2162402X.2015.1051298
11. Lee CH, Romain G, Yan W, Watanabe M, Charab W, Todorova B, Lee J, Triplett K, Donkor M, Lungu O, Lux A, Marshall N, Lindorfer M, Goff O, Balbino B, Kang TH, Tanno H, Delidakis G, Alford C, Taylor R, Nimmerjahn F, Varadarajan N, Bruhns P, Zhang Y, Georgiou G. (2017) IgG Fc Domains that Bind C1q but not Effector Fcγ Receptors Delineate the Significance of Complement-Mediated Cell Cytotoxicity and Phagocytosis in Antibody Function [Nature Immunol](#) 18(8):889-898
12. Varadarajan N. (2017) Unmasked: Single-Cell Profiling of Immune Cell Populations in Tumors [Mol Ther](#) 25(8):1745-1747
13. Ritthipichai K, Haymaker C, Martinez-Paniagua M, Aschenbrenner A, Yi X, Zhang M, Kale C, Hailemichael Y, Overwijk WW, Vence L, Roszik J, Varadarajan N, Nurieva R, Radvanyi LG, Hwu

- P, Bernatchez C. (2017) Multifaceted role of BTLA in the control of CD8⁺ T cell fate after antigen encounter [Clin Cancer Res](#) 23(20):6151-6164
14. [An X](#), [Sendra VG](#), [Liadi I](#), [Ramesh B](#), [Romain G](#), Haymaker C, [Martinez-Paniagua M](#), Lu Y, Radvanyi LG, Roysam B, [Varadarajan N](#) (2017) Single-cell Profiling of Dynamic Cytokine Secretion and the Phenotype of Immune Cells [Plos One](#) 12(8):e0181904
 15. Moogk D, Zhong S, Yu Z, [Liadi I](#), Perez-Garcia A, Fang V, Dougherty J, Osman I, [Varadarajan N](#), Restifo NP, Frey A, Krogsgaard M (2016) Constitutive Lck activity drives sensitivity differences between CD8⁺ memory T cell subsets [J Immunol](#) 197(2): 644-654.
 16. [Mahendra A](#), Peyron I, Thauinat O, Dollinger C, Gilardin L, Sharma M, Wootla B, Rao DN, Padiolleau-Lefevre S, Boquet D, More A, [Varadarajan N](#), Kaveri SV, Legendre C, Lacroix-Desmazes S. (2016) Generation of Catalytic Antibodies Is an Intrinsic Property of an Individual's Immune System: A Study on a Large Cohort of Renal Transplant Patients [J Immunol](#) 196:4075-4081.
 17. [Ramesh B](#), Frei CS, Cirino PC, [Varadarajan N](#). (2015) Functional enrichment by direct plasmid recovery after Fluorescence Activated Cell Sorting [Biotechniques](#) 59(3):157-61.
 18. Merouane A, Villamizar NR, Liu Y, [Liadi I](#), [Romain G](#), Singh H, Lu J, Cooper LJN, [Varadarajan N](#), Roysam B. (2015) Automated and Quantitative Profiling of Individual Cell-Cell Interactions from High-throughput Time-lapse Imaging Microscopy in Nanowell Grids (TIMING) [Bioinformatics](#) 31(19):3189-975.
 19. [Kaul V](#), [Varadarajan N](#). (2015) Microsystem assays for studying interactions between single cells **Wiley-Blackwell Biotechnology Series** (Book chapter)
 20. [Liadi I](#), Singh H, Villamizar NR, [Romain G](#), Merouane A, Kebriaei K, Huls H, Qiu P, Roysam B, Cooper LJ, [Varadarajan N](#). (2015) Individual motile CD4⁺ T cells can participate in efficient multi-killing through conjugation to multiple tumor cells [Cancer Immunology Research](#) 3(5); 473–82.
 21. [Romain G](#), Senyukov VV, Villamizar NR, Merouane A, Kelton W, [Liadi I](#), [Mahendra A](#), Georgiou G, Roysam B, Lee DA, [Varadarajan N](#). (2014) Antibody Fc-engineering improves frequency and promotes kinetic boosting of serial killing mediated by natural killer cells [Blood](#) 2014 Nov 20;124(22):3241-9. doi: 10.1182/blood-2014-04-569061
 22. Ogunniyi AO, Thomas BA, Politano TJ, [Varadarajan N](#), Landais E, Poignard P, Walker BD, Kwon DS, Love JC. (2014) Profiling Human Antibody Responses by Integrated Single-Cell Analysis. [Vaccine](#) May 19;32(24):2866-73 doi: 10.1016/j.vaccine.2014.02.020
 23. [Sendra VG](#), [Lie A](#), [Romain G](#), Agarwal SK, [Varadarajan N](#). (2013) Detection and isolation of auto-reactive human antibodies from primary B cells. [Methods](#) Dec 1; 64(2):153-9. doi: 10.1016/j.ymeth.2013.06.018
 24. Dekosky BJ, Ippolito GC, Deschner RP, Lavinder JJ, Wine Y, Rawlings BM, [Varadarajan N](#), Giesecke C, Dörner T, Andrews SF, Wilson PC, Hunicke-Smith SP, Willson CG, Ellington AD, Georgiou G. (2013) High-throughput sequencing of the paired human immunoglobulin heavy and light chain repertoire. [Nat Biotech](#) Jan 20; 31(2):166. doi: 10.1038/nbt.2492.
 25. [Liadi I](#), Roszik J, [Romain G](#), Cooper LJN, [Varadarajan N](#). (2013) Quantitative High-Throughput Single-Cell Cytotoxicity Assay for T cells [J Vis Exp](#) 2013 Feb 2;(72). doi: 10.3791/50058
 26. [Ramesh B](#), [Sendra VG](#), Cirino PC, [Varadarajan N](#). (2012) Single-cell characterization of autotransporter mediated *Escherichia coli* surface display of disulfide-bond containing proteins [J Biol Chem](#) Nov 9;287(46):38580-9. doi: 10.1074/jbc
 27. [Varadarajan N](#), Kwon DS, Law KM, Ogunniyi AO, Anahtar MN, Richter JM, Walker BD, Love JC. (2012) Rapid, efficient functional characterization and recovery of HIV-specific human CD8⁺ T cells using microengraving. [Proc Natl Acad Sci U S A](#). 109(10):3885-90.

28. Skretas, G, Makino T, Varadarajan N, Pogson M, Georgiou G. (2012) Multi-copy genes that enhance the yield of mammalian G Protein-coupled receptors in *Escherichia coli*. Metab Eng Sep14(5):591-602. doi: 10.1016/j.ymben.2012.05.001
29. Varadarajan N, Julg B, Yamanaka YJ, Chen H, Ogunniyi AO, McAndrew E, Porter LC, Piechocka-Trocha A, Hill BJ, Douek DC, Pereyra F, Walker BD, Love JC. (2011) A high-throughput single-cell analysis of human CD8⁺ T cell functions reveals discordance for cytokine secretion and cytolysis. J Clin Invest Nov 1;121(11):4322-31.
30. Varadarajan N, Pogson M, Georgiou G and Iverson BL. (2009) A three-color multi-substrate flow-cytometric assay to engineer protease specificity for nitro-tyrosine. J Am Chem Soc 131(50):18186-90.
31. Varadarajan N, Cantor J, Georgiou G and Iverson BL. (2009) Construction and flow-cytometric screening of targeted enzyme libraries. Nature Protocols 4(6):893-901
32. Varadarajan N, Georgiou G, Iverson BL. (2008) Engineered Proteases that Cleave Specifically after Sulfated Tyrosine for the Detection of Post-Translationally Modified Peptides Angew Chem Intl Ed 47(41):7861
33. Varadarajan N, Rodriguez S, Hwang BY, Georgiou G, Iverson BL. (2008) Engineering a Family of Highly Active and Selective Endopeptidases with Programmed Substrate Specificities. Nature Chemical Biology 4(5):290-4
34. Hwang BY, Varadarajan N, Li H, Rodriguez S, Iverson BL, Georgiou G. (2007) Substrate Specificity of the *Escherichia coli* Outer Membrane Protease OmpP. J Bacteriology 189: 522-30.
35. Varadarajan N, Gam J, Olsen MJ, Georgiou G, Iverson BL. (2005) Engineering of protease variants exhibiting high catalytic activity and exquisite substrate selectivity. Proc Natl Acad Sci U S A. 102:6855-60.

PATENTS & DISCLOSURES

1. Christopher Love, Navin Varadarajan, Boris Juelg and Bruce Walker “Composition and methods for assessing cytotoxicity of single cells” PCT/US2009/050411.
<https://patents.google.com/patent/US20120149592A1/en>
2. Navin Varadarajan, Gabrielle Romain, Ivan Liadi, Victor Sendra, and Badrinath Roysam “Integrated Functional and Molecular Profiling of Immune Cells”.
<https://patents.google.com/patent/WO2016154620A1/en>
3. Navin Varadarajan and Irfan Bandey “Enzymatic immunomodulation of tumors”.
<https://patents.google.com/patent/WO2016191283A2/en>
4. Navin Varadarajan, Richard Willson and Jay R T Adolacion “Broad spectrum serological diagnostics”.
<https://patents.google.com/patent/WO2016191344A1/en>
5. Navin Varadarajan, Gabrielle Romain, Laurence Cooper and Harjeet Singh “Combination therapy combining CAR⁺ T cells with appropriately timed immunomodulatory antibodies”.
<https://www.google.com/patents/WO2017035117A1?cl=en>
6. Navin Varadarajan “Multi-use combined micro and nanowell plates”.
<https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2017059227>
7. Navin Varadarajan, Shaza Abnouf and Ramesh Balakrishnan “Engineered chymotrypsins and uses thereof”
8. Navin Varadarajan, Melisa Martinez, Irfan N Bandey, and Harjeet Singh “Methods of improving the longevity of immune cells”

SELECTED INVITED SEMINARS

- University of Texas M.D. Anderson Cancer Center, Distinguished Lecture Seminar Series, Immunology Department, 2010. ‘Quantifying functional human immune responses by integrated single cell analysis’
- Morgan Welch Inflammatory Breast Cancer Symposium, University of Texas M.D. Anderson Cancer Center, 2012. ‘Rapid screening of human antibodies against IBC markers’
- Georgia Institute of Technology, Department of Chemical Engineering, 2014. ‘Advancing immunotherapy one cell at a time’
- Princeton University, Department of Chemical Engineering, 2014. ‘Advancing immunotherapy one cell at a time’
- Dartmouth College, Thayer School of Engineering, 2015. ‘Advancing immunotherapy one cell at a time’
- Cornell University, Department of Chemical Engineering, 2015. ‘Advancing immunotherapy one cell at a time’
- Gulf Coast Consortia, Keck seminar series, 2015. ‘Advancing immunotherapy one cell at a time’
- University of Texas, Austin, Department of Molecular Biosciences, 2015. ‘Advancing immunotherapy one cell at a time’
- Fluidigm, Houston, Keynote speaker, 2015. ‘Biology’s next frontier’
- Single Cell Congress, Boston MA, 2015. ‘Single-cell approaches to immunotherapy’
- Melanoma Research Alliance, Washington DC, 2016. ‘Single cell metrics of adoptive T cell therapy for the treatment of melanoma patients’
- Single-cell congress, NIH, Bethesda MD, 2016. ‘Single cell metrics of adoptive T cell therapy for the treatment of melanoma patients’
- Application of Automated Microscopy and Image Informatics to Cancer Research, Houston, TX, 2016. ‘Advancing immunotherapy one cell at a time’
- 7th International Conference of Biomolecular Engineering, San Diego, CA, 2017. ‘Advancing Cancer Immunotherapy One Cell at a Time’
- NIAID Single-cell workshop, Rockville, MD, 2017. ‘Single-cell functional and transcriptional profiling of T cells’
- University of California, Riverside, Department of Chemical & Environmental Engineering, CA, 2018 ‘Advancing Cancer Immunotherapy One Cell at a Time’
- MD Anderson Cancer Center, Pediatric Grand Rounds, Houston, TX, 2018. ‘Advancing Cancer Immunotherapy One Cell at a Time’
- BD Immunology Summit Keynote speaker, San Francisco, CA, 2019. ‘Advancing Cancer Immunotherapy One Cell at a Time’
- LiveSTRONG Cancer Institute, University of Texas Dell Medical School, Austin, TX, 2019. ‘Advancing Cancer Immunotherapy One Cell at a Time’
- University of Texas Health Science Center, Houston, TX, 2019. ‘Advancing Cancer Immunotherapy One Cell at a Time’

CURRENT POST-DOCTORAL FELLOWS

<u>Name</u>	<u>Position</u>	<u>Dates</u>	<u>Degree/ Institution</u>
Melisa Martinez	Post-doctoral fellow	11/2013-	Ph.D., Faculty of Medicine UNAM (National Autonomous University of Mexico)
Irfan Nassem Bandey	Post-doctoral fellow	01/2015-	Ph.D., Academia Sinica (Taiwan)
Ankita Leekha	Post-doctoral fellow	09/2018-	PhD, University of Delhi (India)
Xingyue An	Post-doctoral fellow	09/2019-	PhD, University of Houston

POSTDOCTORAL & GRADUATE STUDENTALUMNI

<u>Name</u>	<u>Position/Degree</u>	<u>Dates</u>	<u>Current position</u>
Ankit Mahendra	Post-doctoral fellow	07/2013-05/2018	Scientist, Sanofi, Boston MA
Gabrielle Romain	Post-doctoral fellow	03/2012-07/2016	Scientist, Kite/Gilead, San Francisco CA
Victor Sendra	Post-doctoral fellow	06/2011-06/2013	Investigator, Dept of Pathology, University of Buenos Aires, Argentina.
Vandana Kaul	Post-doctoral fellow	03/2013-07/2014	Scientist II, Lake Pharma, San Carlos CA
Jay R Adolacion	Ph.D.	09/2013-06/2019	Assistant Professor, University of Philippines
Fatemeh Sadeghi	Ph.D.	09/2014-12/2019	Postdoctoral fellow, University of North Carolina, Chapel Hill.
Xingyue An	Ph.D.	09/2013-06/2019	Postdoctoral Fellow, UH.
Shaza Abnouf	Ph.D.	09/2012-12/2018	Postdoctoral Fellow, UH.
Ivan Liadi	Ph.D.	09/2010-07/2015	Postdoctoral Fellow, MD Anderson Cancer Center, TX
Balakrishnan Ramesh	Ph.D.	09/2010-10/2015	Scientist, Muufri, San Francisco, CA
Conrad Hom	M.S.	09/2016-12/2018	Northrop Gunman, UT
Thai Vu	M.S.	09/2011-06/2013	Medical School, Houston, TX.
Anthony Lie	M.S.	09/2010-08/2012	Process/Project Engineer - KBR, Inc, Houston

CURRENT GRADUATE STUDENTS

<u>Name</u>	<u>Degree</u>	<u>Expected graduation</u>
Mohsen Fathi	Ph.D.	2020
Ali Rezvan	Ph.D.	2022
Arash Saedi	Ph.D.	2022

Monish Kumar	Ph.D.	2023
Melisa Montalvo	Ph.D.	2024
Yongshuai Li	Ph.D.	2024
Rohan Kulkarni	Ph.D.	2024
Kwan-Ling Wu	Ph.D.	2024
Samiur Rahman Sefat	Ph.D.	2024
Sina Jamalzadegan (joint with Prof. Vekilov)	Ph.D.	2024