

Curriculum vitae

Name: Sarvjeet Singh, PhD, MBA

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Education

Year	Degree	Field of Study	Institution
2018-2020	MBA	Healthcare Management, Project Management	University of Texas at Dallas
2006	Ph.D.	Tumor Biology/Molecular Biology	Centre for Cellular and Molecular Biology (CCMB); Hyderabad, India
2000	M.Sc.	Biochemistry	Hamdard University; New Delhi, India
1998	B.Sc.	Biochemistry	Delhi University; New Delhi, India

Postdoctoral Training

Year(s)	Titles	Specialty/Discipline	Institution
2007-13	Postdoctoral Fellow in Molecular Cardiology	Molecular Cardiology	UT Southwestern Medical Center (UTSW); Dallas, TX

Faculty and Academic Appointments

Year(s)	Academic Title	Department	Academic Institution
2021-present	Clinical Associate Professor	College of Applied and Collaborative Studies (CACS)	University of North Texas at Frisco; TX

2023-2025	Program Director	B.S. Applied Project, Design, and Analysis, CACS	University of North Texas at Frisco; TX
2018-2024	Adjunct Faculty	Internal Medicine/ Cardiology	UT Southwestern Medical Center; Dallas, TX
2019-2021	Adjunct Faculty	Biology/School of Arts and Sciences	University of North Texas; TX
2015-2018	Instructor	Internal Medicine/ Cardiology	UT Southwestern Medical Center; Dallas, TX
2013-2015	Asst. Instructor	Internal Medicine/ Cardiology	UT Southwestern Medical Center; Dallas, TX

Honors and Awards

Year	Name of Honor/Award	Awarding Organization
2025	Excellence in Healthcare Award	Health 2.0 Conference, USA
2024	Professional Development Grant Award	University of North Texas at Frisco
2024	Dean's Choice Faculty Award	University of North Texas at Frisco
2023	Professional Development Grant Award	University of North Texas at Frisco
2020	Excellence in Teaching Award	University of North Texas, Dallas
2019	Colloquium for Advancement of Free Enterprise (CAFÉ) Graduate Fellowship	University of Texas at Dallas
2019	3 rd Place at the 10 th International Emory Global Health Case Competition	Emory University
2018-19	Competitive Scholarship for the Full Time MBA Cohort	University of Texas at Dallas
2010	Finalist: The Louis N. and Arnold M. Katz Basic Science Research Award	American Heart Association
2009	Young Investigator Travel Award	American Heart Association
2009-11	South Central Postdoctoral Fellowship Award	American Heart Association

2005	International Travel Grant Award	CSIR and Department of Biotechnology (Government of India)
2005	International Travel award	Cold Spring Harbor Laboratory
2002	Best Poster Presentation at the Annual CCMB Open Day	Centre for Cellular and Molecular Biology (CCMB); Hyderabad, India
2001-2006	National Eligibility Test Scholarship (Pre-doctoral Fellowship)	Council of Scientific and Industrial Research (CSIR), India
1997	2 nd Place in the Annual Biochemistry Quiz. Delhi University; New Delhi, India	Delhi University

Committee Service

Year(s)	Name of Committee	Institution/Organization
2024	Member, Enology and Brewing Faculty Search Committee	CACS, UNT at Frisco
2024	Member, Analytics Faculty Search Committee	CACS, UNT at Frisco
2024	Member, Project Management Faculty Search Committee	CACS, UNT at Frisco
2023-present	Lead Developer, Graduate program in PDA (MS in PDA)	CACS, UNT at Frisco
2023-2024	Member, Toulouse Graduate School/CACS Faculty Search Committee	CACS/Toulouse Graduate School, UNT at Frisco
2023-2024	Member, Interdisciplinary Studies Faculty Search Committee	CACS/Toulouse Graduate School, UNT at Frisco
2023-2025	Member, Curriculum Committee	CACS, UNT at Frisco
2023-2025	Member, Executive Committee	CACS, UNT at Frisco
2022-2024	Co-developer, Enology and Brewing minor program and certificate	CACS, UNT at Frisco
2022	Member, Faculty Advising Committee	CACS, UNT at Frisco
2022	Member, Design Faculty Search Committee	CACS, UNT at Frisco

2022	Member, Project Management Faculty Search Committee	CACS, UNT at Frisco
2022-2024	Chair, Reappointment and Promotion Committee	CACS, UNT at Frisco
2022-2024	Dissertation Defense Committee	UT Southwestern Medical Center; Dallas, TX
2018-19	Leader of the Graduate Dean's Council at University of Texas at Dallas	University Of Texas at Dallas
2007	Judging committee for the UTSW Postdoctoral travel award and Women in Science travel award	UTSW Postdoctoral Association
<u>National/International</u>		
2005	Organizing committee for the 1 st Annual International Conference on Translational Research for Cancer and other Diseases	New York Medical College and Centre for Cellular and Molecular Biology (CCMB)
2004	Organizing and proceedings committee for the International European Molecular Biology Organization (EMBO) workshop on Cell Interaction in Development and Disease	European Molecular Biology Organization (EMBO) and CCMB
1996-1998	Organizing committee for the Annual Biochaperone inter-college event	Delhi University; New Delhi, India

Professional Societies

Dates	Society Name, member
2018-present	American College of Healthcare Executives
2012-2024	Sigma Xi
2011-present	American Association for Advancement of Science
2007-present	American Heart Association

Grant Support

<u>Past</u>	<i>Grantor:</i> American heart Association, Post-Doctoral Research fellowship
	<i>Title of Project:</i> Cytoglobin: A novel calcineurin-dependent hemoprotein modulating apoptosis within stressed cardiomyocytes
	<i>Role:</i> Principal Investigator
	<i>Project Number and dates:</i> 09POST2260759, July 2009-2011
	<i>Grantor:</i> National institutes of Health, R01 Grant
	<i>Title of Project:</i> Cytoglobin: A stress-responsive hemoprotein modulating cardiomyocyte survival
	<i>Role:</i> Co-investigator
	<i>Project Number and dates:</i> R01 HL102478-02, May 2012-Feb 2017
	<i>Grantor:</i> National institutes of Health, U54 Grant
	<i>Title of Project:</i> Myoediting of Duchenne Muscular Dystrophy
	<i>Role:</i> Co-investigator
	<i>Project Number and dates:</i> U54AR068791-01, Sept. 2015- June 2020

Teaching and Training Activities

Year(s)	Activity
<u>Undergraduate Level University Teaching</u>	
2020-present University of North Texas	BIOL 1710 (General Biology) Science Major Course BIOL 1730 (General Biology) Science Major Laboratory Course BIOL 1720 (General Biology) Science Major Course BIOL 1740 (General Biology) Science Major Laboratory Course BIOC 3621 (Principles of Biochemistry) Lecture Course BIOL 3510 (Cell Biology) Lecture Course BIOL 3451 (Genetics) Lecture Course BIOL 1132 (Environmental Science) Lecture Course INDS 2050 (Industrial Life Science) Lecture Course INDS 4030 (Applied Team Development) Lecture Course SPDA 3020 (Collaborative Thinking-Project Management) Lecture Course NCPS 4900 (Applied Fermentation) Special Problems Lecture Course SPDA 4021 (Cultural Contexts-Project Management) Workshop Course SPDA 4120 (Capstone) Lecture Course SPDA 4121 (Capstone) Workshop Course

	CACS 2010 (Applied Project Management) Lecture Course CACS 2020 (Research Designs and Methods) Lecture Course CACS 2040 (Applied Team Development) Lecture Course INDS 1001 (Seminar in Industrial Distribution) Professional Development Course ADAR 4980 (Applied Project Analytics) Lecture Course
2019 University of North Texas at Dallas	BIOL 1730 (General Biology) Science Major Laboratory Course BIOL 1710 (General Biology) Science Major Lecture Course
<u>Medical and graduate school didactic and small group teaching</u>	
2014-16	Instructor for “Introduction to Research” course for Medical Student Research Program (MSRP) at UTSW
<u>Medical student rotations</u>	
2015; Magid Mohamed (UTSW Medical School)	Training in Myogenic Progenitor Cell isolation, transcriptional and gene expression assays.
2010; Anita Kallepalli (UTSW Medical School)	Training in cellular morphometric analysis
2009; Bryan Reyes (UTSW Medical School)	Oversight and training in basic molecular biology techniques and genetically modified mouse models of cardiovascular biology and disease.
2009; Adrian Salinas (UTSW Medical School)	Oversight and training in cellular biology techniques and genetically modified mouse models of cardiovascular biology and disease.
<u>Undergraduate student trainees</u>	
2012; Christina Collier (Physician Scientist Training Program)	Overview of basic techniques with focus on understanding of mouse models of disease.
2010; Melanie Weiler (UT Austin)	Advance Training in molecular biology techniques and genetically modified mouse models of muscle regeneration and disease.
2009; Sudhir Thotakura (Texas Tech University Health Science Center)	Training in basics of molecular biology and cellular morphometric analysis
<u>Graduate student trainees</u>	

2016-2019; Tara Tassin (Research Scientist)	Advisor in models of cardiovascular disease, data collection, analyses and troubleshooting.
2013-16; Dylan Rivas (Lab technician)	Training in routine molecular biology techniques with focus on data analysis and troubleshooting.
2010-11; Shandon Collins (Lab technician and Medical School Applicant)	Taught nucleic acid biology and experimental procedures. Oversight in experiment planning, design and execution. Advance training in molecular biology techniques

Postgraduate medical education (graduate & continuing medical education)

2015-16; Chris French, MD (Cardiology Fellow, UTSW)	Advisor in experimental design, data analysis and troubleshooting
2013-14; David Sutcliffe, MD (Pediatric Cardiology Fellow, UTSW)	Advisor in experimental design, data analysis and troubleshooting.
2012-14; Kasey Leger, MD (Pediatric Hematology & Oncology Fellow, UTSW)	Training in basic molecular biology techniques with focus on micro RNA biology. Guidance with sample preparation, experimental design and troubleshooting.

Postdoctoral trainees and Faculty

2017-19; Anwarul Ferdous Faculty, Hill Lab, UTSW)	Training in isolation, purification, maintenance. and manipulation of mammalian myogenic progenitor cells.
2017-19; Xuan Jiang (Research Associate, Mammen Lab, UTSW)	Training in iPSC culture, lineage specification into epicardial cells and cardiomyocytes, isolation, purification, maintenance. and manipulation of mammalian epicardial cells, and myogenic progenitor cells.
2014; Krithika Selvarajan (Postdoctoral Fellow, Mammen Lab, UTSW)	Training in specialized cell isolation techniques and advanced molecular biology techniques.
2009-13; Diana Canseco (Postdoctoral Fellow, Mammen Lab, UTSW)	Training in molecular and cellular biology techniques. Training in cell culture and <i>in vitro</i> assays. Continued support with experiment design and troubleshooting

Invited Lectures

2026	The Human Heart: Lessons Learnt from Pigs, Pythons, and Pregnancy	2026 Annual Gathering of American Mensa
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2025	Advancing Scientific Understanding And Validation of Traditional Healing Practices	Health 2.0 Conference, Las Vegas, Nevada, USA
2025	Mysteries of the human heart, Osher Lifelong	CC Young Senior Living, Osher Lifelong Learning Institute (OLLI)
2024	Mechanisms of stress response in the mammalian heart and skeletal muscle	Frisco Research Seminar Series at UNT at Frisco
2023	Conflict management in teams-based projects	Project Based Learning (PBL) Symposium, UNT at Frisco
2022	Models of cardiac development and disease	Highland Park Middle School, Dallas
2022	Mysteries of the human heart	Osher Lifelong Learning Institute (OLLI), UNT, Frisco
2015	Identifying novel modulators of muscle regeneration in the mammalian heart	Centre for Cellular and Molecular Biology, Hyderabad, India
2013	Cytoglobin: A novel epicardial regulator of epithelial to mesenchymal transition (EMT) within the ischemic heart	American heart Association Scientific Sessions 2013, Dallas
2010	Cytoglobin regulates myocyte proliferation and differentiation by homeostatic and stress induced repression of p53 transcriptional activity	American heart Association Scientific Sessions 2010, Chicago

Service to the Community

Year(s)	Role	Organization or institution
2022-present	Public Lectures	Osher Lifelong Learning Institute (OLLI)
2018-present	Community Outreach Volunteer	Hope Farms (Non Profit)
2018-present	Cub Archery Range Master	Boy Scouts of America, Circle 10
2016-2023	Head Coach for the Boys Track and Field Team	Bradfield Elementary School (Highland Park ISD)
2016-2021	Cub scout Den Leader	Bradfield Elementary School (Highland Park ISD)

2008-present	Grand Prize Judge at the Annual Dallas Regional Science and Engineering Fair	Southern Methodist University (SMU)
2007-2008	Judge at the Annual Dallas Regional Science and Engineering Fair	Southern Methodist University (SMU)

Bibliography

Peer-Reviewed Publications

Original Research Articles

1.	Ferdous A, Singh S , Luo Y, Abedin MJ, Jiang N, Perry CE, Evers BM, Gillette TG, Kyba M, Trojanowska M, Hill JA. Fli1 Promotes Vascular Morphogenesis by Regulating Endothelial Potential of Multipotent Myogenic Progenitors. <i>Circ Res</i> . 2021 Oct 29;129(10):949-964. PMID: 34544261
2.	Rotter D*, Grinsfelder D.B*, Parra V., Pedrozo Z., Singh S. , Sachan N. and Rothermel B.A. (* equal contribution) Calcineurin and its regulator, RCAN1, confer time-of-day changes in susceptibility of the heart to ischemia/reperfusion. <i>Journal of Molecular and Cellular Cardiology</i> 2014; 74(103-111). PMID 24838101
3.	Singh S. , S.M. Manda, J.M. Shelton, R.R. Chirumamilla, S.C. Goetsch, J.W. Schneider, Q. Ye, J.A. Richardson, B.A. Rothermel, and P.P.A. Mammen. Cytoglobin modulates myogenic progenitor cell viability and muscle regeneration. <i>PNAS (Track II)</i> 2014; 111(1): E129-38. PMID: 24367119
4.	Quitens R., S. Singh , K. Lemaire, K. DeBock, , A. Schraenen, B. VanHoef, I. Vroegrijk, V. Costa, P. VanNoten, S. Lehnert, M. Granvik, L. VanLommel, L. Thorrez, N. Hendrickx, J.A. Romijn, J.M. Shelton, L. Scorrano, H.R. Lijnen, P.J. Voshol, P.P.A. Mammen, and F.C. Schuit. Mice deficient in the respiratory chain gene <i>Cox6a2</i> are protected against high-fat, diet-induced obesity and glucose intolerance. <i>PLos ONE</i> 2013; 8(2): e56179.
5.	R.M. Srivastava, S. Singh and A. Khar. Immunomodulation and therapeutic activity of curcumin. <i>International Immunopharmacology</i> 2011; 11(3): 331-341.
6.	Singh S.* , S.M. Manda*, D. Sikder, B.A. Rothermel, D.J. Garry, and P.P.A. Mammen. Calcineurin activates cytoglobin transcription in hypoxic myocytes. (* Contributed equally to manuscript) <i>Journal of Biological Chemistry</i> 2009 284:10409-10421

7.	Varalakshmi C., B.V.V.Pardhasardhi, A.M. Ali, R.M. Srivastava, S. Singh , and A. Khar. Immunomodulatory effects of curcumin <i>in vivo</i> . <i>International Immunopharmacology</i> 2008; 8(5):688-700
8.	Singh S. and A. Khar. Activation of NFkB and Ub-proteasome pathway during apoptosis induced by a serum factor is mediated through the upregulation of the 26S proteasome subunits. <i>Apoptosis</i> 2006; 11(5):845-59
9.	Singh S. and A. Khar. Biological effects of curcumin and its role in cancer chemoprevention and therapy. <i>Current Medicinal Chemistry-Anti Cancer Agents</i> 2006; 6(3):259-270.
10.	Singh S. and A. Khar. Differential gene expression during apoptosis induced by a serum factor: role of mitochondrial F0-F1 ATP synthase complex. <i>Apoptosis</i> 2005; 10(6):1469-82
11.	Mitra R., S. Singh , and A. Khar. Anti-tumor immune responses. Review. <i>Expert Reviews in Molecular Medicine</i> (2003); Accession Number and Short Code : 03005623, Cambridge University Press.(http://www.expertreviews.org/03005623h.htm)

Proceedings of Meetings

1.	Singh S. , Rivas D., Canseco D., Weiler M., Huang J., Gemelli T., Tassin T., Shelton J., Richardson J.A., Sadek H.A. and Mammen P.A. Cytochrome: A Novel Regulator of the DNA Damage Response Within Cardiomyocytes (2018) Circulation Research 2018; 123: A428
2.	Tassin T., Huang J., Gemelli T., Kanchwala M., Punnen L.M., Chung E., Rivas D., Goetsch S., Daniel J.A., Shelton J., Richardson J.A., Schneider J., Xing C., Singh S. and Mammen P.A. Mechanistic Insights into Duchenne Muscular Dystrophy-Associated Cardiomyopathy. (2018) Circulation Research 2018; 123: A310
3.	Leger K., Singh S.* , Canseco D., Sutcliffe D., Darsaklis K., Rivas D., Karim-Ud-Din S., Collins S.C., Thibodeau J.T., Mishkin J.D., Patel P.C., Markham D.W., Drazner M.H., Mammen, P.P.A. Identification of Novel Circulating microRNAs in Ischemic Cardiomyopathy Utilizing Whole Blood microRNA Profiling. (* Equal Contribution) (2013) Circulation 2013; 128: A13120
4.	Canseco D.C.; Grote E.V.; Singh S. ; Rothermel B.A.; Mammen P.A.. Cytochrome-Deficient Mice Develop Maladaptive Cardiac Remodeling After Ischemia-Reperfusion Injury Due to Alterations in NF-kB Signaling. (2013) Circulation. 2013; 128: A18175

5.	Singh S. , Wu S.-Y, Canseco D.C., Manda S.M., Nguyen T., Ye Q., Ramachandran A., Gerard R.D., Sadek H., Rothermel B.A., Chiang C.-M. and Mammen P.P.A. Cytoglobin: A Novel Epicardial Regulator of Epithelial to Mesenchymal Transition (EMT) Within the Ischemic Heart. (2013) <i>Circulation</i>. 2013; 128: A11639
6.	Singh S. , S.-Y Wu, D.C. Canseco, S.M. Manda, T. Nguyen, Q. Ye, A. Ramachandran, R.D. Gerard, H. Sadek, B.A. Rothermel, C.-M. Chiang and P.P.A. Mammen. Cytoglobin regulates myocyte proliferation and differentiation by homeostatic and stress induced repression of p53 transcriptional activity. (2010) <i>Circulation</i> 2010; 122: A544
7.	Singh S. , R. Chirumamilla, D.C. Canseco, S. Thotakura, M. Jeffrey, R.D. Gerard, Z. Yan, M.H. Drazner, C. Malloy, B.A. Rothermel, J.A. Hill and P.P.A. Mammen. Myoglobin overexpressing hearts develop physiologic hypertrophy and have a blunted response to mechanical loading. (2009) <i>Circres.ahajournals.org/cgi/reprint/105/7/e10 (P122)</i> .
8.	Singh S.* , S.M. Manda and P.P.A. Mammen. Cytoglobin: A calcineurin-dependent hemoprotein regulating cardiac growth and apoptosis. (2008) <i>Circres.ahajournals.org/cgi/reprint/103/5/e35 (P99)</i>

Manuscripts Submitted for Scientific Review

1.	Singh S. , Wu S.-Y, Canseco D.C., Manda S.M., Nguyen T., Ye Q., Ramachandran A., Gerard R.D., Sadek H., Rothermel B.A., Chiang C.-M. and Mammen P.P.A. Cytoglobin regulates myocyte proliferation and differentiation by homeostatic and stress induced repression of p53 transcriptional activity.
2.	Singh S. , R. Chirumamilla, D.C.Canseco, S.Thotakura, M.Jeffrey, R.D.Gerard, Z.Yan, M.H. Drazner, C. Malloy, B.A. Rothermel, J.A. Hill and P.P.A. Mammen. Myoglobin overexpressing hearts develop physiologic hypertrophy and have a blunted response to mechanical loading.
3.	Leger K., Singh S* , D. Canseco, S. Collins, S. Karim-Ud-Din, J.T. Thibodeau, J.D. Mishkin, P.C. Patel, D.W. Markham, M.H. Drazner, and P.P.A. Mammen. Whole blood microRNA profiling identifies novel miRs in ischemic cardiomyopathy (* Contributed equally to manuscript)
4.	Canseco D.C., Selvarajan K., Rivas D., Grote E.V., Rothermel B.A., Singh S.* and Mammen P.P.A Mice with cardiac-specific deficiency of cytoglobin develop maladaptive cardiac remodeling after ischemia-reperfusion injury due to alterations in NFκB signaling. (* Co-corresponding author)

5.	Singh S.* , Rivas D., Canseco D.C., Gemelli T., Tassin T., Shelton J., Richardson J.A., Sadek H., Rothermel B.A., Mammen P.P.A. Cytoglobin: A novel regulator of the DNA damage response within cardiomyocytes (*Co-corresponding author)
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