

Curriculum Vitae

Name: Subroto B. Chatterjee, Ph.D.

Office Address: John Hopkins University
Division of Pediatric Cardiology
Department of Pediatrics
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Current Appointments:

Professor, Department of Pediatrics, Johns Hopkins University, School of Medicine, Baltimore, MD
Faculty member, Cell and Molecular Medicine Graduate Program, School of Medicine 1996-present

Medical License: (N/A)

Education and Training (in chronological order):

1964	BSc,	Lucknow University, India, Chemistry
1966	MSc,	Lucknow University, India, Biochemistry
1968	MS,	Dalhousie University, Canada, Biochemistry
1972	Ph.D.	University of Toronto, Canada, Biochemistry
1972-1974	Post-doctoral fellow Biochemistry, Michigan State Univ. with Dr. Charles Sweeley.	
2007	Business for Scientists, a mini executive MBA course given by the Kellogg school of business, North Western University,	
2009	Business matters for Scientists, a course given by the Carey School of Business, Johns Hopkins University,	

Professional Experience (in chronological order):

1970-1972	Instructor, University of Toronto,
1969-1972	Research Assistant, University of Toronto
1972-1974	Research Associate, Michigan State University
1975-1976	Instructor, The Johns Hopkins University
1976-1984	Assistant Professor, Johns Hopkins University
1984-1996	Associate Professor, Johns Hopkins University
1996-Present	Professor, Johns Hopkins University

1999-2005	Principal Investigator, Atherosclerosis and Vascular Biology Laboratory, Johns Hopkins Singapore
2000-2005	Adjunct Professor, Department of Biochemistry National University of Singapore, Singapore

RESEARCH ACTIVITIES

Publications:

Articles (Peer-reviewed scientific articles):

1. Yogeeswaran G, Wherrett JR, Chatterjee S, and Murray RK: Gangliosides of cultured mouse cells. **J Biol Chem** 245: 6718-6725, 1970.
2. Chatterjee S and Sweeley CC: The effects of thrombin induced aggregation on human platelet glycolipids. **BBRC** 53: 1310-1316, 1973.
3. Chatterjee S, Sweeley CC and Velicer LF: Biosynthesis of proteins. Nucleic acids and glycosphingolipids by synchronized KB cells. **BBRC** 54: 585-592, 1973.
4. Chatterjee S, Sweeley CC and Velicer LF: Glycosphingolipids of human KB cells grown in monolayer, suspension and synchronized cultures. **J Biol Chem** 250: 61-66, 1975.
5. Chatterjee S, Velicer LF and Sweeley CC: Glycosphingolipids glycosylhydrolases and glycosidases of synchronized human KB cells. **J Biol Chem** 250: 4972-4979, 1975.
6. Chatterjee S and Kwiterovich Jr PO: Glycosphingolipids of lipoproteins in normal and hyperlipoproteinemic states. **Lipids** 11: 462-466, 1976.
7. Chatterjee S, Sekerke CS and Kwiterovich Jr PO: Alterations in the cell surface glycosphingolipids and other lipid classes of fibroblasts in familial hypercholesterolemia. **Proc Nat Acad Sci, USA** 73: 4339-4343, 1976.
8. Chatterjee S, Kwiterovich Jr PO and Sekerke CS: Effects of tunicamycin on the binding and degradation of low density lipoproteins and glycoprotein synthesis in cultured human fibroblasts. **J Biol Chem** 254: 3704-3707, 1979.
9. Chatterjee S, Kwiterovich Jr PO and Sekerke CS: Effects of tunicamycin on the binding, internalization and degradation of low density lipoproteins by human fibroblasts. **Eur J Biochem** 120: 435-441, 1981.
10. Chatterjee S, Sekerke CS and Kwiterovich Jr PO: Increased urinary excretion of glycosphingolipids in familial hypercholesterolemia. **J Lipid Res** 23: 513-522, 1982
11. Chatterjee S, Kwiterovich Jr PO, Gupta P, Erozan Y, Alving CA, Richard R: Localization of urinary lactosylceramide in cytoplasmic vesicles of renal tubular cells in homozygous familial hypercholesterolemia. **Proc Natl Acad Sci, USA** 80: 1313-1318, 1983.
12. Chatterjee S, Gupta P, Kwiterovich Jr PO: Separation of human urinary proximal tubular cells from familial hypercholesterolemic homozygous by Ficoll gradient centrifugation. **Virchow Archiv (Cell Path)** 45: 365-376, 1984.
13. Chatterjee S, Gupta P, Pyeritz R, Kwiterovich Jr PO: Localization of ceramide trihexoside in urinary renal tubular cells in Fabry's disease. **J Clin Path** 82: 24-28, 1984.
14. Chatterjee S, Kwiterovich Jr PO: Glycosphingolipids and lipoproteins: A review. **Can J Biochem and Cell Biol** 62: 385-397, 1984.

15. Chatterjee S, Kwiterovich Jr PO, Hoeg JM, Brewer HB: Evaluation of renal tubular epithelial cells in acid-cholesteryl ester hydrolase deficiency. **Clinical Genetics** 29: 360-368, 1986.
16. Chatterjee S, Clarke KS, Kwiterovich Jr PO: Uptake and metabolism of lactosylceramide in cultured proximal tubular cells from normal and familial hypercholesterolemic homozygous. **J Biol Chem** 261: 13480-13486, 1986.
17. Chatterjee S, Clarke KS, Kwiterovich Jr PO: Regulation of synthesis of lactosylceramide and long chain bases in normal and familial hypercholesterolemic cultured proximal tubular cells. **J Biol Chem** 261: 13474-13479, 1986.
18. Chatterjee S and Castiglione E: Characterization of UDP-Galactose: glucosylceramide \square 1 \square 4 galactosyltransferase activity in cultured human proximal tubular cells. **Biochim Biophys Acta** 923: 136-142, 1987.
19. Chatterjee S, Yanni S: Analysis of neutral glycosphingolipids and sulfatides by high performance liquid chromatography. **LC-GC** 5: 571-574, 1987.
20. Chatterjee S: Role of low density lipoprotein receptor on the regulation of synthesis of lactosylceramide in cultured normal human proximal tubular cells. **Indian Journal of Biochemistry and Biophysics**, 25: 85-89, 1988.
21. Chatterjee S, Trifillis S, Regec A: Effects of gentamicin on cell morphology and on the binding, internalization and degradation of low density lipoproteins in cultured human proximal tubular cells. **Can J Biochem and Cell Biology** 65: 1049-1056, 1987.
22. Chatterjee S: Gentamicin induced alteration in phospholipid metabolism in cultured human proximal tubular cells. **J Biochemical Toxicology** 2: 181-201, 1987.
23. Chatterjee S, Bose S: Morphological and biochemical effects of gentamicin and cyclosporin on urinary cell phospholipids and phospholipases in man. **J Biochem Toxicology** 3: 47-58, 1988.
24. Ghosh P, Chatterjee S: Effects of gentamicin on sphingomyelinase activity in cultured human proximal tubular cells. **J. Biol. Chem.** 262: 12550-12556, 1987.
25. Naidu S, Chatterjee S, Uematsu S, Phillipart M, Moser H: Rett syndrome: Observations on a novel glycolipid: elderly patients and thermographic findings. **Brain and Development** 9: 525-528, 1987.
26. Chatterjee S, Ghosh N, Castiglione E, Kwiterovich Jr PO: Regulation of glycosphingolipid glycosyltransferases by low density lipoproteins in cultured human proximal tubular cells. **J Biol Chem** 263: 13017-13022, 1988.
27. Chatterjee S, Ghosh N, Goh Mei Di, Rohmann E, Killian W, Rett A: Glycosphingolipids in Rett syndrome. **Brain Research and Development** 12: 85-87, 1990
28. Chatterjee S, Ghosh N: Neutral sphingomyelinase from human urine: purification and preparation of monospecific antibodies. **J. Biol Chem** 264: 12534-12561, 1989.
29. Chatterjee S: Lactosylceramide stimulates aortic smooth muscle cell proliferation. **Biochem. Biophys. Res. Comm.** 181: 554-561, 1991.
30. Chatterjee S: Phosphatidylcholine stimulates the activity of Glucosylceramide \square 1 \square 4 galactosyltransferase (GalT-2) in cultured human proximal tubular (PT) cells. **Ind J. Biochem Biophys** 27: 375-378, 1990.
31. Chatterjee S: Role of oxidized low density lipoproteins in atherosclerosis: Effects on smooth muscle cell proliferation. **J. Mol. And Cell. Biochem.** 111: 143-147, 1992.
32. Chatterjee S, Ghosh N, Khurana S: Purification and partial characterization of Uridine diphosphate galactose: glycosylceramide, \square 1 \square 4 galactosyltransferase (GalT-2) from human kidney. **J. Biol. Chem.** 267: 7148-7153, 1992.

33. Chatterjee S, Jett M: Glycosphingolipids as putative receptors for Staphylococcal enterotoxin-B in renal cells. **Mol. Cell Biochem.** 113 #1: 25-31, 1992.
34. Chatterjee S: Regulation of synthesis of lactosylceramide in cultured normal and tumor proximal tubular cells. **Biochem. Biophys. Acta.** 1167: 339-344, 1993.
35. Chatterjee S: Neutral sphingomyelinase increases the binding, internalization, and degradation of low density lipoproteins and synthesis of cholesteryl ester in cultured human fibroblasts. **J. Biol. Chem.** 268: 3401-3406, 1993.
36. Chatterjee S: Effects of monensin on glycosphingolipid metabolism in cultured human proximal tubular cells. **Indian J Biochem and Biophysics** 30: 346-352, 1993.
37. Chatterjee S: Neutral sphingomyelinase action induces signal transduction of tumor necrosis factor- α in increasing cholesteryl ester synthesis in human fibroblasts. **J. Biol. Chem.** 269: 879-882, 1994.
38. Chatterjee S, Khullar M, Shi Wan Y: Digalactosylceramide is the receptor for Staphylococcal enterotoxin-B in human kidney proximal tubular cells. **Glycobiology** 5: 327-333, 1995.
39. Alessenko A, Chatterjee S: Neutral sphingomyelinase: localization in rat liver nuclei and involvement in regeneration/proliferation. **Mol. Cell Biochem.** 143: 169-174, 1995.
40. Jett M, Neill R, Welch C, Boyle T, Bernton E, Hoover D, Lowell G, Hunt RC, Chatterjee S, Gemski P: Identification of Staphylococcal enterotoxin-B sequences important for the induction of lymphocyte proliferation by using synthetic peptide fragments of the toxin. **Infection and Immunity** 62: 3408-3415, 1994.
41. Taki T, Chatterjee S: A novel assay method for sphingomyelinase activity. **Analyt. Biochem.** 224: 490-493, 1995.
42. Khullar M, Chatterjee S: Staphylococcal enterotoxin-B alters [14 C]-choline transport and phosphatidylcholine metabolism in cultured human kidney proximal tubular cells. **Mol. Cell Biochem.** 146: 115-120, 1995.
43. Chatterjee S, Ghosh N: Oxidized low density lipoprotein stimulates aortic smooth muscle cell proliferation. **Glycobiology** 6: 303-311, 1996.
44. Bhunia A, Han H, Snowden A, and Chatterjee S: Lactosylceramide stimulates Ras GTP loading, kinases (MEK, Raf), p 44 mitogen activated protein kinase and *c-fos* expression in human aortic smooth muscle cells. **J. Biol. Chem.** 271: 10660-10666, 1996.
45. Chatterjee S, Shi W Y, Wilson P, and Mazumdar A: Role of lactosylceramide and map kinase in the proliferation of proximal tubular cells in human polycystic kidney disease. **J. Lipid Res.** 37: 1334-1344, 1996.
46. Chatterjee S, Cleveland T, Inokuchi J, Radin NS: Studies of the action of ceramide-like substances (D- and L-PDMP) on sphingolipid glycosyltransferases and purified lactosylceramide synthase. **Glycoconjugate J.** 13: 481-486, 1996.
47. Chatterjee S, Bhunia AK, Han H, Snowden A: Oxidized low density lipoproteins stimulate galactosyltransferase activity, ras activation, p 44 mitogen activated protein kinase, and *c-fos* expression in human aortic smooth muscle cells. **Glycobiology** 7: 703-710, 1997.
48. Mukhin D and Chatterjee S: A receptor-based immunoblot assay to detect Staphylococcus enterotoxin-B in biological fluids. **Analytical Biochemistry** 245: 213-217, 1997.
49. Yin M, Yang SQ, Lin HZ, Lane MD, Chatterjee S, Diehl AM: Tumor necrosis factor- α promotes nuclear localization of cytokine inducible c/EBP isoforms in hepatocytes. **J. Biol. Chem.** 271: 17974-17978, 1996

50. Chatterjee S: Oxidized low density lipoprotein and lactosylceramide both stimulate the expression of proliferating nuclear antigen and the proliferation of aortic smooth muscle cells. **Ind. J. Biochem & Biophys.** 34: 56-61, 1997.
51. Balagopalakrishna C, Bhunia AK, Snowden A, Rifkind JM, Chatterjee S: Minimally modified low density lipoproteins induce aortic smooth muscle cell proliferation via the activation of mitogen activated protein kinase. **Mol. Cell. Biochem.** 170: 85-89, 1997.
52. Bhunia AK, Han H, Snowden A, Chatterjee S: Redox regulated signaling by lactosylceramide in the proliferation of aortic smooth muscle cells. **J. Biol. Chem.** 272: 15642-15649, 1997.
53. Chatterjee S, Dey S, Shi W-Y, Thomas K, Hutchins GM: Accumulation of glycosphingolipids in human atherosclerotic plaque and unaffected aorta tissue. **Glycobiology** 7: 57-65, 1997.
54. Ghosh N, Sabbadini R, Chatterjee S: Identification, partial purification, and localization of a neutral sphingomyelinase in rabbit skeletal muscle. **Mol. Cell. Biochem.** 189: 161-168, 1998.
55. Matsuda K, Ma Y, Ito Y, Barghout V, Chatterjee S: Isolation of less polar alkali-labile glycolipids of human brain by high-speed countercurrent chromatography. **J. Liq. Chrom. & Rel. Technol.** 21(1/2): 103-110, 1998.
56. Lawler JG, Ming Y, Diehl AM, Roberts E, Chatterjee S: TNF- α stimulates the maturation of sterol regulatory element binding protein-1 (SREBP-1) in human hepatocytes through the action of neutral sphingomyelinase. **J. Biol. Chem.** 273: 5053-5059, 1998.
57. Arai Y, Bhunia AK, Chatterjee S, Bulkley G: Lactosylceramide stimulates the expression of Mac-1 receptor in human neutrophils and superoxide production. **Circ. Res.** 82: 540-547, 1998.
58. Bhunia AK, Arai T, Bulkley G, Chatterjee S: Lactosylceramide mediates TNF- α induced redox signaling of intracellular adhesion molecule (ICAM-1) expression and neutrophil adhesion in human umbilical vein endothelial cells. **J. Biol. Chem.** 273: 34349-34357, 1998.
59. Chatterjee S. Sphingolipids in atherosclerosis and vascular Biology. **Art Thr. Vasc. Biol.** (1998) 18:1523 –1533.
60. Chatterjee S, Han H, Rollins S, Cleveland T: Molecular cloning, characterization, and expression of a novel human neutral sphingomyelinase. **J. Biol. Chem.** 274: 37407-37412, 1999.
61. Simon CG Jr, Chatterjee S, Gear AR: Sphingomyelinase activity in human platelets. **Thrombosis Research** 190: 155-161, 1998.
62. Jan J-T, Chatterjee S, Griffin D: Sindbis virus entry into cells triggers apoptosis by activating sphingomyelinase leading to the release of ceramide. **J. Virology** 74: 6425-6432.2000.
63. Cho P, Chatterjee S, Alveradou R. Lactosylceramide Mediates Shear – Induced Endothelial Superoxide Production and Intercellular Cell Adhesion molecule-1 Expression. **J.Vascular Res** 38(6),551-559,2001.
64. Lauer S, Chatterjee S, Haldar K: Uptake and hydrolysis of sphingomyelin analogs in *P. falciparum*-infected red cells. **Molecular and Biochemical Parasitology**,115,275-281, 2001.
65. Bhunia AK and Chatterjee S: GD₃ recruits reactive oxygen species to induce cell proliferation and apoptosis in human aortic smooth muscle cells. **J. Biol. Chem.**, 2002, 277:16, 396-16,402
66. Gong NL and Chatterjee S. Platelet endothelial cell adhesion molecule-1 structure and role in signal transduction **Mol. Cell Biochem** 253: 151-158. 2003.

67. Chatterjee S and Wei HM. Roles of Glycosphingolipids in cell signaling: Adhesion, migration and proliferation. **Methods in Enzymology** 363: 300-312 2003.
68. Martin S and Chatterjee S. Methods to study glycosphingolipids in signal transduction: apoptosis. **Methods in Enzymology** 363: 284-299 2003.
69. Gong NL, Chowdhury S.H. Wei HM, Chatterjee, S. Lactosylceramide recruits phospholipase A₂ to induce platelet endothelial cell adhesion molecule (PECAM-1) expression and adhesion of endothelial cells to monocytes. **Proc.Natl.Acad Sci USA** 101:6490-6495, 2004.
70. Kolmakova, A. Kwiterovich Jr PO, PO-Jr, Virgil D, Aloupovic P, Wright- C; Martin S. Chatterjee S. Apolipoprotein C-1 activates the neutral sphingomyelinase ceramide pathway to induce apoptosis in human aortic smooth muscle cells manuscript submitted to **Art Thr Vasc Biol.**24:264-269,2004.
71. Chatterjee,S. Berliner,J Subbanagounder,GG.Bhunia,AK and Koh,S. Identification of a Biologically active component in minimally oxidized low density lipoprotein(MM-LDL) responsible for aortic smooth muscle proliferation. **Glycoconjugate J** 20, 331-338,2004.
72. Chatterje,S Gakenheimer,K Han Hui, Dey ,S. Hutchins, G Dobromilskaya, I and Snowden,A. Oxidized low density lipoprotein stimulates apoptosis via activation of neutral sphingomyelinase in human aortic smooth muscle cells. In **Sphingomyelin Metabolizing Enzymes** (Haldar,D and Das S eds. 2004).
73. Chatterjee,S and Kolmakova, A. Lactosylceramide synthase: from Molecular Biochemistry to Biological function. In **Sphingomyelin Metabolizing Enzymes** (Haldar,D and Das,S eds)2004.
74. Du X, Qui B, Zhan X, Kolmakova A, Gao F, Hofmann L, Cheng L, Chatterjee S, Yang X. Intravascular MR/radiofrequency-enhanced vascular gene transduction/expression: feasibility study in pigs. **Radiology** 2005; 236:939-44.
75. Fang L, Wei H, Chowdhury SH, Gong N, Song J, Heng CK, Sethi S, Koh TH, Chatterjee S. Association of Leu125Val polymorphism of platelet endothelial cell adhesion molecule-1 (PECAM-1) gene & soluble level of PECAM-1 with coronary artery disease in Asian Indians. **Indian J Med Res** 2005;121:92-99
76. Kolmakova A, Chatterjee S. Platelet derived growth factor recruits lactosylceramide to induce cell proliferation in UDPGal:GlcCer:β1→4Galactosyltransferase (GalT-V) mutant Chinese hamster ovary cells. **Glycoconj J** 2005; 22: 401-7
77. Martin SF, Chatterjee S, Parinandi N, Alevriadou BR. Rac1 inhibition protects against hypoxia/reoxygenation-induced lipid peroxidation in human vascular endothelial cells. **Vasc. Pharmacol** 2005;43:148-56.
78. Rajesh M, Kolmakova A, Chatterjee S. Novel role of lactosylceramide in vascular endothelial growth factor mediated angiogenesis in human endothelial cells. **Circ .Res** 2005;97:796-804.
79. Wei H, Fang L, Song J, Chatterjee S. Statin-inhibited endothelial permeability could be associated with its effect on PECAM-1 in endothelial cells. **FEBS Lett** 2005;579:1272-8
80. Wei H, Fang L, Song J, Chatterjee S. Lovastatin compromises C-reactive protein induced endothelial dysfunction including altered expression of cell adhesion molecules and increased monocyte recruitment. **Atherosclerosis** 2005;178:399-401.
81. Martin S, Williams N, and Chatterjee S. Lactosylceramide is required in apoptosis induced by Neutral sphingomyelinase. **Glycoconjugate J.** 23;147-157 2006.
82. Chatterjee,S Kolmakova, A and Miller, M. The role of the phospholipid sphingomyelin in heart disease. **Current Opinion in Investigational Drugs**,7: 219-228 ,2006.

83. Steen,H. Kolmakova, A. Matthias,S. Rodriguez,ER. Gao,F. Chatterjee, S and Lima,JAC. MRI visualized neo-intimal dissection and co-localization of novel apoptotic markers apolipoprotein C-1, ceramide and caspase-3 in a Watanabe hyperlipidemic rabbit model. **Atherosclerosis.191: 82-89** 2007
84. Chatterjee,S Neill,R. Shupp, J. Hammamieh,R, Ionin, B and Jett ,M. Identification of staphylococcal enterotoxin B domains involved in binding to cultured human kidney proximal tubular cells: imparting proliferation and death. **Exp Biol and Med** 232:1142-1151,2007.
85. Steen,H, Lima,J,Chatterjee,S. Kolmakova,A, Gao,F Rodriguez,R and Stuber,M. High resolution three-dimensional aortic MR –angiography and quantitative vessel wall characterization of different atherosclerotic stages in a rabbit model. **Investigative Radiology** 42:614-621,2007.
86. Chatterjee, S. and Pandey, A. The Yin and Yang of lactosylceramide metabolism: implications in cell function. **Biochem.Biophys Acta.** 1780:370-382, 2007.
87. Rajesh, M Mukopadhyay,P Batkai,S. Hasko,G Liadet,L. Huffman,A. Ungvari,Z. Mackie,K Chatterjee,S and Pacher,P. CB2 cannabinoid receptor stimulation attenuated TNF –induced endothelial cell activation, transendothelial migration of monocytes and monocyte-endothelial adhesion. **Am J. Physiology. Heart Circ Physiol** 293:H2210-H2218, 2007
88. Chatterjee, S. Kolmakova, A and Mohanraj,R. Regulation of lactosylceramide synthase; implicatio s as a drug target. **Curr. Drug Targets** 9: 272-281, 2008
89. Dan-Tang,Y., Pandey,A, Kolmakova,A Wang,XT., Venkataraman,SS. Chatterjee,S and Boey,F,Y.C. Use of a novel anti-proliferative compound coated on a biopolymer to mitigate platelet –derived growth factor-induced proliferation in human aortic smooth muscle cells: comparison with sirlolimus. **Glycoconjugate J** , 26: 721-732, 2009
90. Chatterjee, S. and Pandey, A. Drug eluting stents Friend or Foe: A review of cellular mechanisms behind the effects of paclitaxel and sirlolimus eluting stents. **Curr.Drug Metabolism** 9:554-566, 2008.
91. Kolmakova, A. Mohanraj, R, Pili ,R., Zang, D and Chatterjee, S. VEGF recruits lactosylceramide to induce platelet endothelial cell adhesion molecule expression and angiogenesis in vitro and vivo **Glycoconjugate .J.**, 10, 1071-1079,2009.
92. **Chatterjee,S** Pathophysiology and Vascular Biology of Atherosclerosis,in **Johns Hopkins Handbook of Hyperlipidemia**, Elsevier Press (Kwiterovich P. Ed) pp48-57,2010. Wolter Kluwer/Lippincot Williams and Wilkins Publishers,Philadelphia.
93. **Chatterjee, S, Alsaeedi,N** Lactosylceramide synthase as a therapeutic target to mitigate multiple human diseases in animal models. **Adv .In Exptl. Med. And Biol** 2012, 749 ; 153-169
94. **Chatterjee, Subroto.** "Identification of Staphylococcal Enterotoxin B Sequences Important for Binding to a Glycosphingolipid Receptor Imparting Renal Cell Death and T Lymphocyte Proliferation." **Journal of Bioterrorism and Biodefense** 3, no. 3 (2012): 2157-526. <http://dx.doi.org/10.4172/2157-2526.S1.007>.
95. Catherine J. McNeal, **Subroto Chatterjee**, Jennifer Hou, London Worthy, Craig Lerner, BS, Ronald D. Macfarlane, Petar Alaupovic, Robert Brocia, BA. Human HDL Containing a Novel ApoC-I Isoform Induces Smooth Muscle Cell Apoptosis. **Cardiovascular Res** 2013, 98:83-93
96. **Chatterjee, Subroto**, Nezar Alsaeedi, Jennifer Hou, Veera Venkata Ratnam Bandaru, Lan Wu, Marc K. Halushka, Roberto Pili, Georges Ndikuyeze, and Norman J. Haughey. "Use of a

Glycolipid Inhibitor to Ameliorate Renal Cancer in a Mouse Model." **PloS one** 8, no. 5 (2013): e63726.

97. **Chatterjee, Subroto**, Djahida Bedja, Sumita Mishra, Christine Amuzie, Alberto Avolio, David Kass, Dan Berkowitz, and Mark Renehan. "Inhibition of Glycosphingolipid Synthesis Ameliorates Atherosclerosis and Arterial Stiffness in Apo E^{-/-} Mice and Rabbits Fed a High Fat and Cholesterol Diet." **Circulation** (2014): CIRCULATIONAHA-113
98. Mishra, Sumita, and **Subroto Chatterjee**. "Lactosylceramide promotes hypertrophy through ROS generation and activation of ERK1/2 in cardiomyocytes." **Glycobiology** 24, no. 6 (2014): 518-531.

Non-peer reviewed articles: (N/A)

1. Chatterjee S, Kwiterovich Jr PO: In *vivo* uptake of lactosylceramide on LDL in proximal tubular cells in a subject with familial hypercholesterolemia. Glycoconjugate Proceedings of the VIII International Symposium 2: 595-596, 1985.
2. Chatterjee S: Regulation of glycolipid metabolism in cultured renal cells. Glycoconjugate Proceedings of the IX International meeting 1: 150-151, 1987.

Editorials

Ceramide: oxidative stress and endothelial nitric oxide synthase. *Circulation* (2002) 106: 2200-2206.

Book Chapters, Monographs

1. Chatterjee S, Kwiterovich Jr PO and Sekerke CS: Alterations in the cell surface glycosphingolipids and their metabolism in familial hypercholesterolemic fibroblasts. International Symposium on the Cell Surface Glycolipids (Sweeley CC, ed) American Chemical Society Symposium Series #128, 265-302, 1980.
2. Kwiterovich Jr PO, Bachorik PS, Chatterjee S, Franklin FA, Haber C, Sniderman A: Plasma lipid, lipoprotein cholesterol and LDL B protein levels in Lipid Clinic patients with dyslipoproteinemia. In: US-USSR First Joint Lipoprotein Symposium, Laboratory Research Joint Population Studies, Leningrad, USSR, May 26-27, 1981. U.S. Department of Health and Human Services, NIH Publication No. 83-1966, November 1982, pp. 149-164.
3. Chatterjee S, Trifillis A, Regec A: Morphological and biochemical effects of gentamicin on cultured renal tubular cells. In: Renal Heterogeneity and Target Cell Toxicity, Bach PH, Lock EA (eds), John Wiley & Sons, New York, pp.549-552, 1984.
4. Chatterjee S, Kwiterovich Jr PO: In vivo uptake and metabolism of lactosylceramide on LDL in homozygotes with familial hypercholesterolemia. In: Lipid Storage Disorders (Biological and Medical Aspects) (Salvayre R, ed) NATO INSERM conference on "Lipid storage disorders", Plenum Press 150: 613-623, 1988.

5. Chatterjee S: Effects of getamicin on neutral sphingomyelinase in vitro and in vivo in man: A Review, in International Conference on Biomembranes in Health and Disease Vol2 p. 381-389, 1991.
6. Chatterjee S, Ghosh N: Purification of neutral sphingomyelinase from human urine. Methods in Enzymology, Phospholipase 197: 540-547, Academic Press, Orlando, Fl.
7. Balagopalakrishna C, Nirmala R, Rifkind JM, Chatterjee S: Modification of low density lipoproteins by erythrocytes and hemoglobin under hypoxic conditions. Adv. Expl Med Biol vol 18: 337-345, 1997.
8. Chatterjee S: Staphylococcal enterotoxin-B binds to digalactosylceramide and alters [¹⁴C]-choline transport in cultured human kidney proximal tubular cells. Medical Defense Bioscience Review Proceedings vol. III. 1554-1556, 1996.
9. Chatterjee S: Assay of lactosylceramide synthase and comments on its potential role in signal transduction. Methods in Enzymology 311: 73-81, 2000
10. Chatterjee S, Banerjee D: Preparation of liposomes. CRC Press , 2001
11. Martin S, Chatterjee S, Sphingolipid Metabolism in Atherosclerosis (2003) Adv in Gerontology Research 12: 71-96 2003.

Books: (N/A)

Biotechnology/Industry Experience

1. Lion Pharmaceuticals, Baltimore Principal Investigator
2. Co-principal Investigator. Small Business Research grant funded by NIH collaboratively between Lion Pharmaceuticals and Johns Hopkins University Baltimore.
3. Lipid Therapeutics , Co-Founder and Chairman. Baltimore MD, USA.
4. Merlin Pharmaceutical Singapore: Member of the scientific advisory board.
5. Amalyte Pharmaceuticals LLC. Co-Founder and member of the scientific advisory board.
6. Amarani Therapeutics. Founder and Chair of the scientific advisory board.

Inventions, Patents, Copyrights (pending, awarded):

Dr. Chatterjee /Johns Hopkins University has been awarded 67 national and international patents and several others are pending approval. Dr. Chatterjee also independently owns a US patent. A selected few are described below.

1. Chatterjee, SB. Methods for Treatment of Conditions Associated with Lactosylceramide..U.S. Patent
Award 5,972,928, October 26, 1999, World Patent # WO 00/06145
2. Chatterjee, SB. Compositions and Methods for Modulating Serum Cholesterol. U.S. Patent # 60,121,442, World Patent # WO 00/50574
3. Chatterjee, SB. Recombinant N-SMase and Nucleic Acids Encoding Same. U.S. Patent # 5,919,687,
World Patent # WO 98/28445 .
4. Chatterjee, SB. Receptor-based assays for Pathogens. U.S. Patent # 96,101,977 (April 2003), World
Patent # WO 98/35233

6. Chatterjee,SB. Methods for the Treatment of conditions associated with Lactosylceramide.U.S.Patent award 6,228,889.May 8,2001
7. Chatterjee, SB Methods for the Treatment of conditions associated with Lactosylceramide. U.S.Patent award 6, 511, 979.B1, January 28, 2003
8. Chatterjee, SB. A Neutral Sphingomyelinase Antisense Ribozyme Construct U.S. Application # patent # awarded June 13, 2007.(owned independently).

Biotech Companies

Dr. Chatterjee is the founder of several Biotech companies such as Amalyte Pharmaceuticals, Amarani Therapeutics and serves in the Scientific advisory board of these and several other companies.

Extramural Sponsorship (Current, Recent, Previous)

Current Grants

1. **P01 –HL-107-153** (Chatterjee, S. PI project #5) 4/1/11-3/31/18
6.0 calendar **NIH /NHLBI**
\$200,000 direct cost per year

Glycosphingolipid and glycosphingolipid glycosyltransferases in cardiovascular disease

The goal here is to determine the efficacy and safety of a glycosphingolipid glycosyltransferase inhibitor in preventing atherosclerosis in an animal model of hypercholesterolemia. We also plan to synthesize new glycosyltransferase inhibitors and determine their efficacy. The post translational modification of a glycosyltransferases in cardio vascular disease will be examined.

Overlap: None

2. **3P01HL 107153-03S1** (Chatterjee,S,PI) 5/1/13- 4/30/15
2.0 calendar **NIH/NHLBI** \$50,000 direct
cost per year

Evaluation of the role of lysoglycosphingolipids in atherosclerosis. The goal here is to determine whether lysoglycosphingolipids affect atherosclerosis and what are mechanism by which these compounds bring about this phenotype.

Overlap: None.

Recently Funded/Completed Grants

1. **1P30DK090868-01** 12/1/10-11/30/11
1.2 calendar **NIH NIDDK**

\$82,000 direct cost

Novel inhibitor to ameliorate polycystic kidney disease. The goal is to determine the use of a glycosyltransferases inhibitor to ameliorate cyst formation in a mouse model of polycystic kidney disease.

Overlap: None

2. **Novel drug eluting stents.** 1/2009-7/2010
1.5 calendar **National Research Foundation, Singapore**

The goal here is to assess in vitro the use of a glycosyltransferase inhibitor coated on a biopolymer to mitigate cell proliferation and comparison with sirtolimus.

3. **Novel Inhibitor of Renal Cancer.** 8/2009-7/2010
TEDCO, State of Maryland
The goal here is to determine the efficacy and safety of a glycosyltransferase inhibitor in an immune-compromised mouse model of renal cancer.
4. **Testing a Novel Glycolipid Inhibitor for Treatment of PKD using an Orthologous Mouse Model**
NIH RFA
The goal is to determine whether an inhibitor of angiogenesis (a glycosyltransferase inhibitor) can mitigate angiogenesis and cyst growth in a mouse model of PKD. There is no overlap with this proposal and the aims of the other pending/ongoing proposals.
5. **Platelet endothelial cell adhesion molecule polymorphisms and cardiovascular disease in Singapore**
National Medical Research Council, Singapore
6. **NIH R01 HL-67027-01**
NIH NHLBI
Reperfusion-Induced Endothelial Cell Dysfunction
7. **Novel Sterol Independent Effects of Cerivastatin**
Bayer
Bayer Pharmaceuticals Medical research grant.
8. **Regulation of Lactosylceramide by galactosyltransferases cells.**
Johns Hopkins University School of Medicine
Institutional research grant.
9. **Novel biopolymers for use in delivering drugs to mitigate restenosis**
National Research Foundation of Singapore
10. **Eumil: a hypocholesterolemic/antiproliferative herbal formulation.**
Johns Hopkins Singapore grant.
11. **Eumil: A herbal formulation may prevent renal cancer. NIH; Johns Hopkins Center for Alternative Medicine research grant .**

Previous Grants and Contracts:

1. Lipid and Lipoprotein studies in the multiethnic populations in Singapore. Total direct cost \$1.3 million. Johns Hopkins Singapore Pvt Ltd and the NSTB, Singapore 1999-2001 (S.Chatterjee, PI).
2. Mechanisms by which Simvastatin modulates sterol homeostasis. 1999-2000, Merck.
3. Tokten award for the United Nations Development Program: To serve as consultant in the area of atherosclerosis and nephrotoxicity research, 1988
4. American Society for Biochemistry and Molecular Biology Travel grant award to attend the International Union of Biochemistry meetings in Prague, Czechoslovakia
5. American Heart Association grant, 1978
6. U.S. Army Defense Research Grant, 1988
7. U.S. Army Defense Research Contract, 1989
8. National Institutes of Health institutional grant
9. National Institutes of Health supplemental grant

10. National Institutes of Health administrative support grant to purchase equipment National Institutes of Health grant (RO-1-34657) "Sphingomyelin accumulation in renal tubular cells" 1984-1987
11. National Institutes of Health grant (RO-1-31722) "Glycosphingolipid storage in proximal tubular cells" 1983-1986
12. National Institutes of Health grant (RO-1DK-31722). Regulation of Lactosylceramide in Renal cells" 1991-1996.
13. Andrew Mellon Career Development award
14. University of Toronto Health Scholar award
15. U.S. Army Defense Research grant (DAMD 17-91-Z-01027): Glycosphingolipids as putative receptors for Staphylococcal Enterotoxin-B (SEB) in cultured renal cells. 1991-1996.
16. Lion Pharmaceuticals, sponsored research grant (1996 – 1998)
17. National Institutes of Health (Grant #DK31764-14): Signal transduction by endothelial xanthine oxidase (Gregory Bulkley, M.D., Principal Investigator) (1996 – 2000)
18. National Institutes of Health Program project grant. "Biochemical mechanism of aortic smooth muscle cell proliferation" (1991 – 1996)

Other:

1. Raised approximately \$5,000 for the American Heart Association by arranging a dinner-lecture "Research Awareness" program
2. Raised \$27,000 for RKVI foundation to support destitute children in India, Johns Hopkins Childrens Center and Linwood Center for autistic children in Ellicott City, Maryland
3. Raised \$80,000 to organize the international symposium entitled: "Sphingolipids as Mediators of Molecular Events" in collaboration with the International Union of Biochemistry and Molecular Biology, August 1997, Napa Valley California
4. Raised \$5,500 towards the XX International Glycoconjugates meeting in Puerto Rico, USA, 2009

EDUCATIONAL ACTIVITIES:

Teaching

University of Toronto. This involves one hour lectures and the supervision of the performance of biochemistry exercises by first year medical students. A total of 70 hours per academic year was spent in this teaching program. Jan 1970 – Mar 1972

University of Toronto. This involves 30 hours of lectures and group discussion on the "Renal Electrolyte System" to second year medical students. Sept 1971 – Dec 1971

Michigan State University, Department of Biochemistry Special Topics in Biochemistry for Graduate Students. Dr. Robert A. Ronzio, March 1974, Course Director.

Johns Hopkins University, Undergraduate tutorial course in membrane patho-biochemistry. Involves lectures, laboratory exercises and research projects. Sept 1978 – Present

Seminars in Lipid Research and Vascular Biology, Johns Hopkins University, Department of Pediatrics, Sept 1996 – 1999 Director,

Johns Hopkins University Markey graduate program in Cellular and Molecular Medicine: Teach Lipid, Lipoprotein Biochemistry, and Pathophysiology in Atherosclerosis. March 1997–Present, Member. Chair, Graduate oral board examination.

Johns Hopkins University, Program of Excellence in Glycoscience 2012 Advance course on Glycobiology for PhD and MD fellows and graduate students .

Johns Hopkins University, Program of Excellence in Glycobiology. 2013 Advance course on laboratory methods in Glycobiology.

Johns Hopkins University, Cellular and Molecular Medicine Graduate Program: Teach CardioPulmonary graduate course. 2013, 2014

Classroom Instruction

Journal Club Paper Discussion, October 1999, Cell and Molecular Medicine (M.D./Ph.D.) progress JHU-SOM

Atherosclerosis and Vascular Biology (October 2000)

Cell and Molecular Medicine (M.D./Ph.D.) Program Johns School of Medicine

National University of Singapore. Honors Undergraduate Course. Atherosclerosis and Vascular Biology March 2003.

Continuing Medical Education Instruction

Plaque Stability; An Update, March 1999 (Course Director)

Plaque Stability; An Update, May 2000 (Course Director)

Plaque Stability ,An Update May 2001(Course Director)

Atherosclerosis and Vascular Biology Continuing Medical Education May 2002 (Course Director)

Atherosclerosis and Vascular Biology May 2003 (Course Director)

Atherosclerosis and Vascular Biology May 2004 (Course Director)

Advance course in Lipid Training program, Oct 24th 2009 Pathophysiology of Vascular wall in Atherosclerosis

Mentoring

Over the last twenty-five years at the Johns Hopkins University, I have trained the following individuals who have gone on their own to seek careers in Medicine, Biology, Pharmacy, Academia, Federal Government and Industry.

Fellows: Steve Barnes M.D., Leiv Ose M.D., Pradeep Ghosh Ph.D., Paul Kessler M.D., Sharmistha Bose M.D., Michael Miller M.D., Nupur Ghosh Ph.D., Seema Khurana Ph.D., Wan Yan Shi, Pradip Mazumdar Ph.D., Karl Thomas M.D., Srabani Dey Ph.D., Anil Bhunia Ph.D., Dmitry Mukhin Ph.D., Cleo Ming M.D., Paul Cho Ph.D., Meenakshi Sharma Ph.D. Heming Wei MD, Antionina Kolmakova Ph.D. Henning Steen MD, Nan Long Gong Ph.D, Sanaul Haq Chowdhury MD, Sergio Martin Ph.D., Rajesh Mohanraj Ph.D. Sumita Mishra,PhD. Antonina Kolmakova.Sumita Mishra.PhD. Tang Nuo MD.

Some of the above have chosen an Academic Medicine career, these are: Dr. Racusen is an Associate Professor, Department of Pathology, Johns Hopkins Univ.; Drs. Gurbel

and Miller are Associate Professors, Department of Cardiology, Univ. of Maryland and Sinai Hospital, respectively; Dr. Ose is an Associate Professor of Medicine, Univ. of Oslo, Norway; Dr Alessenko is head “Lipids of Cell Nuclei Group” Institute of Chemical Physics, The Russian Academy of Sciences; Dr. Pradeep Ghosh is an Assistant Professor in the Dept. of Anesthesiology, Johns Hopkins University; Dr. Seema Khurana is an Associate Professor, Dept. of Biology, University of Tennessee, and Dr. Takao Taki is the Director General of Otsuka Cell Technology Research Institute; Dr. Bose is lecturer, Dept. of Radiology at Guys Hospital, London. Dr. Paul Cho is a scientist at the FDA in U.S.A.

Senior Visiting Scientists and JHUMI Faculty:

Kazuhiro Matsuda, M.D., Ph.D. (Assistant Professor on sabbatical leave from the Tokyo Medical and Dental University) presently, Associate Professor Hokkaido University, Japan; Madhu Khullar, Ph.D. (Fogarty fellow on sabbatical leave); is currently Professor PGIMER – Chandigarh, India; Alice Alessenko, Ph.D. (Professor on sabbatical leave from Russian Academy of Sciences); Takao Taki, Ph.D. (Associate Professor, Tokyo Medical and Dental University); Roland Smoot, M.D. (Assistant Dean of Medicine, JHMI); Linda Lee, M.D. (Assistant Professor, Dept. of Medicine, JHMI) Tang Nuo MD. On sabbatical leave from Shanghai University, China.

Students: Paul Gurbel, John Grossman, Sheila Dotson, Cecilia Frederic, Jackie Wilson, Matthew Kovalsky, Teresa Song, Robert Theaker, Alvin McCoy, Tae S. Kim, Matthew B. Matthew, Ali Mohiuddin, Robert Koemzopoulos, Meidee Goh, Wei Chu, Stephanie Chiu, Alex Henry, Michael Shin, Eliane Kim, Robert Lamarque, Avi mazumdar, Nisha Garg, Jennifer Byrd, AnishaVarma, Andrew Cosner, Melissa Ward, Dai Ishikawa, Alex John, Robert Skipton, Irina Dobromilskaya, Navara Malayamanm, Pai Meng, Shirley Wong, Tak Cheung Wan, Duan Kui, Kenya Stokes, Pritee Desai, Stephen Koh, Christine Fleming, Vicki Barghout, Galeb Alhabashi, Rajiv J. Gandhi, Nieshia Williams, Thuyj-Anh Nguyen, Helen Brown, Paru Gurnswanni, Davneet Singh, Vikram Singh, Mansi Gadhia, Adam Morgan, Vani Kaur, Ching Ging, Ambarish Pandey, Carina Song, Archana Murali, London.S. Worthy, Nazeer Al Saeedi, Lan Wu, Jennifer Hou, Jeong Hoon Park, Thannapoom Boonipat, Djhida Bedja, Ramsa Rao, Omer Vitai, Usha Singh, Mahmood Siddiqui, Bryan Brensinger, Christine Amuzie, Komal Sampat, Gangotri Jain, Puchong Tharawatanond, Allie Ast, Sara Suzuki, Maya Hernandez, Michael Hong.

MD/PhD

Students Joseph Lawler, Ms. Leilani Sharp

Editorial Activities:

Editor: Indian Journal of Medical Sciences. World Journal of Cardiology

Member, NSF scientific review committee

Adhoc Reviewer: NIH, Neurochemistry Study Section, Metabolism study section, Patho-Biochemistry study section, Dermatology study section, Atherosclerosis study section.

Adhoc Reviewer: NCI Cancer Biology Study section.

Adhoc Reviewer: Journal of Biological Chemistry, Journal of Lipid Research, Arteriosclerosis Thrombosis and Vascular Biology, Journal of Physiology, Proceedings of the National Academy of Sciences, Journal of Immunology, Thrombosis Research, Circulation Research. Atherosclerosis, Journal of Vascular Biology, Glucoconjugate Journal.

ORGANIZATIONAL ACTIVITIES:

Institutional Administrative Appointments (committee, date)

Member, advisory board of the Henrietta Lacks Foundation and member of the scholarship committee (1992-2010-present).

Adhoc reviewer, JHU Professorial Promotion Committee (1998).

Professional Societies (membership, committee, dates, role):

Member, International Conference on the Biochemistry of Lipids
 Federation of the American Society of Biological Chemists
 American Society for the Advancement of Science
 American Society of Complex Carbohydrates
 American Heart Association, Fellow, Council on Atherosclerosis
 Henrietta Lacks Memorial Fellowship Committee

Conference Organizer, Session Chair (sponsor, date, role):

Member and volunteer, Bengali club and Young Men's Association, Lucknow, India (1958 – 1964)
 Founding member of "Prabasi", a cultural association of East Indian community in Toronto, Canada (1968)
 Director of sports and extracurricular activities, University of Toronto, Canada (1970 – 1972)
 Co-director, "India Day" exhibition, Baltimore, USA (1983)
 Secretary and member of the executive committee of "Prantik", Baltimore, USA (1981 – 1983)
 Chairman, Public Information Services, Howard County Division, Maryland Heart Association (1986 – 1988)
 Member, Steering Committee of the Mid-Atlantic Lipid Club (1986 – 1987)
 Member, Community Health program, American Heart Association "Maryland Affiliate" (1987 – 1988)
 Chairman, Medical Sciences Division, and Member, Board of Directors RKV International Foundation (a not for profit charitable organization) (1988 – 1990)

Member, Board of Directors AHA Maryland Affiliate (1998 – 1990)
 Chairman, Howard County Division of the American Heart Association (AHA) “Maryland Affiliate: (1998 – 1990)
 Chairman, Medical and Community Health Program, American Heart Association, “Maryland Affiliate”, Howard County (1990 – 1993)
 Chairman and organizer, IUBMB symposium on “Sphingolipids in Health and Disease”, Jerusalem, Israel (1991)
 Co-chairman, National SCOR – Atherosclerosis meeting on the Role of oxidized LDL in atherosclerosis (1994)
 Co-chairman, Society for Complex Carbohydrates, Medical aspects of Glycobiology (1994)
 Chairman, IUB colloquium on Industrialist/Scientists interface: Role on Biotechnology in Medicine, New Delhi, India (1994)
 Co-chairman, International Union of Biochemistry (IUB), Satellite symposium, “Free oxygen radicals in Biology” (1994)
 Chairman, Thirteenth International Conference on glycoconjugates session entitled “Transmembrane signaling by sphingolipids I”, Seattle, Washington (1995)
 Co-chairman, International Conference on the biochemistry of lipids session on role of sphingolipids, and member organizing committee (1993-1995)
 Co-chairman, International Symposium on Sphingo (glyco) lipid Function, Port Ludlow, Washington, session title “Gangliosides and glycosphingolipids that modulate transmembrane signaling and cellular function” (1995)
 Co-chairman, Gordon Research Conferences on glycolipids and sphingolipids, structure and function session entitled :Ganglioside expression and function” (1995)
 Co-chairman, Role of glycosphingolipids in human health. International conference on Sphingolipids as lipid second messengers. International Union of Satellite Conference, New York, 1997
 Chairman, International Union of Biochemistry, Satellite Meeting entitled “Sphingoglycolipids as mediators of molecular events” (August 1997)
 Co-chairman, New Frontiers in Glyco and Lipid Biology – Japan (August 1999)
 Co-chairman, Eukaryotic Cell Surface Glyconjugates Meeting – Bangalore, India (January 1999)
 Chairman, Symposium on “Plaque Stability: An Update” (March 1999, May 2002)
 National Consultants Meeting, Merck Pharamceutical Company(2002)
 XX International Glycoconjugate Meeting. Member organizing committee 2009.

Advisory Committee, Review Groups (sponsor, date, role):

Adhoc Reviewer: National Heart Lung Blood Institute, 2004
 Adhoc Reviewer: Site Unit National Cancer Institute – 2002,2003
 Adhoc Reviewer: Medical Biochemistry Study Section, 1994
 Adhoc Reviewer: National Institutes of Health, 1998
 Adhoc Reviewer: National Science Foundation, Cell Biology and Neurochemistry, 1998
 Adhoc Reviewer: Tobacco related diseases research and prevention – State of California, 1998
 Adhoc Reviewer: National Medical Research Council of Singapore Oct. 1999
 Adhoc Reviewer: National Cancer Institute,Program project review Jan 2002

Consultantships (organization/agency, date, role):

Wyeth Ayerst, PA. (1999)
 Celera Genomics, Bethesda, MD. (1999-2000)
 Merck (2000-2002) National Adviser/Consultant Lipid disorders. Merck National thought leader
 2000-2005. Merlin Medical Singapore 2000-2005.

RECOGNITION

1. Chatterjee S, Kwiterovich Jr PO: Glycosphingolipids and lipoproteins: A review. Can J Biochem and Cell Biol 62: 385-397, 1984.
2. Kwiterovich PO, Motevalli M, Miller M, Bachorik PS, Kafonek SD, Chatterjee S, Beaty T, Virgil D: Insights into the pathophysiology of hyperapobetalipoproteinemia. Clin. Chem. 37: 317-326, 1991.
3. Chatterjee S: Neutral Sphingomyelinase. Adv. Lipid Res. 26: 25-48, 1993.
4. Chatterjee S, Ghosh N: Regulation of lactosylceramide biosynthesis: A challenge and an opportunity for Glycobiologists. Trends in Glycoscience and Glycotechnology 6: 187-198, 1994.
5. Chatterjee S: Sphingolipids in atherosclerosis and vascular biology. Arter. Thromb. And Vasc. Biol. 18: 1523-1533, 1998.
6. Chatterjee S: Neutral Sphingomyelinase: Past, Present, and Future. Chem And Phy. of Lipids 102: 79-96, 1999.

Awards, honors (title, date, description, sponsor).

Subroto Chatterjee Fellowship awarded by the American Heart Association in recognition for his contributions to AHA science in the State of Maryland, 1990
 Allstar Award, American Heart Association, "Maryland Affiliate" for significant contributions to the AHA goals, 1990
 Outstanding Chairmanship in the State of Maryland, AHA award, 1990
 Distinguished Scientist Lecture, Medical College of Ohio, 1992
 Tokten award from the United Nations Development Program: To serve as consultant in the area of atherosclerosis and bacterial toxin receptor research, 1992
 Outstanding paper published in the area of Atherosclerosis (Editors, Atherosclerosis Digest), 1992
 Distinguished scientist in the State of Maryland citation award from Governor Paris Glendenning, 1995
 Stanley Foundation award, 1995 – 1997
 Mizutani Foundation of Japan Research Grant, 1995
 Monobishu Foundation International Award, 1997
 National Society for Outstanding Professionals, 2003
 Distinguished Medical Research Scientist Ranbaxy award from his Excellency the President of republic of India, 2004
Henrietta Lacks Memorial Lecture: HeL1 Lipid: Its implications in health and Disease . Oct .1, 2011, Johns Hopkins University Baltimore

Invited Talks, Panels (title, date, venue, sponsor):

Adjunct Professor, Dept of Biochemistry National University of Singapore, Singapore

- NATO-INSERM International meeting on Lipid Storage disorders, Toulouse, France, 1987
- International symposium on the biochemical role of glycoconjugates in eukaryotic cells, New Delhi, India, 1987
- FASEB. Sphingolipid Metabolism and Function symposium, Las Vegas, USA, 1988
- International Union of Biochemistry, “Enzymes in lipid storage disorders”, Prague, Czechoslovakia, 1998
- International Conference on Biomembranes in health and disease, “Alterations in membrane function caused by nephrotoxic drugs”, Lucknow, India, 1988
- Sixth International meeting on Rett Syndrome, Vienna, Austria, 1988
- Gordon Research Conference on Lipid Metabolism, 1989
- International symposium on the biochemical role of eukaryotic cell surface macromolecules, New Delhi, India, 1989
- International Symposium on the role of glycosphingolipids in health and disease, Santa Barbara, California, 1990
- International Symposium on free radicals in myocardial injury and atherosclerosis, Chandigarh, India, 1990
- International meeting on “Sphingolipids in Health and Disease” in conjunction with the International Union of Biochemistry meetings, Jerusalem, Israel, 1991
- Gordon Research conference on Sphingolipids and Glycolipids, Waikiki, Hawaii, 1992
- International Meeting on the Biochemistry of Lipids, Lyon, France, 1992
- Choline Phospholipids: Molecular mechanism for human diseases, Coronado, California, 1992
- Visiting Professor, Dept. of Experimental Medicine, Post Graduate Institute of Medical and Experimental Research, Chandigarh, India, 1992
- Visiting Professor, Dept. of Biochemistry, Tokyo Medical and Dental University, Tokyo, Japan, 1993
- Visiting Professor, Dept. of Cell Biology, Soka University, Hachioji-shi, Tokyo, Japan, 1993
- Visiting Scientist, Dept. of Biochemistry, San Diego State University, 1993
- International RINSHOKEN meeting on the role of glycoconjugates in health and disease, Tokyo, Japan, 1993
- Frontiers of research in atherosclerosis and lipid metabolism: A Merrill-Dow Symposium, Baltimore, USA, 1993
- Glyco XII, International symposium on glycoconjugates: Medical Aspects of glycoconjugates research, Kracow, Poland, 1993
- National symposium on the use of toxins in health and disease, Walter Reed Army Institute, 1993
- Plenary speaker, International meeting on Lipids in Health and Disease, Moscow, Russia, 1993
- International Symposium on the Biochemical role of Glycoconjugates, New Delhi, India, 1993
- IUB, Satellite symposium on the role of free oxygen radicals in modern biology, Chandigarh, India, 1994
- IUB, symposium on the role of Lipids in Health and Disease, New Delhi, India, 1994
- IUB, colloquium on Industrialists/Scientists interface: Role of Biotechnology in Medicine, New Delhi, India 1994
- National Meeting of the Society of Complex Carbohydrates, University of Notre Dame, 1994

Visiting Professor, Dept. of Human Biology and Anatomy, University of Western Australia, Perth, Australia, 1995
 International Conference on Glycoconjugates, Seattle, Washington, 1995
 International Union of Biochemistry and Molecular Biology, Singapore, 1995
 Gordon Research Conferences on "Role of Glycosphingolipids and Sphingolipids", Ventura, California, 1995
 International Conferences on the Biochemistry of Lipids, Washington, D.C., 1995
 Co-chair and Conference Organizer, International Conference on Biochemistry of Lipids, August, 1995
 Invited Speaker, Gordon Research Conference on Sphingoglycolipids, Gifu, Japan 1996
 Invited Speaker, International Symposium on the Biochemical Role of Glycoconjugates, New Delhi, 1996
 Chair, "Sphingoglycolipids as mediators of molecular events" – IUBMB Satellite Meeting, August, 1997
 Monobishu Foundation lecture, Tokyo Medical and Dental University, 1997
 Unilever / Elizabeth Arden International symposium on "Frontiers of Sphingolipid Research", 1997
 Mitsubishi Kasai Institute lecture, Japan, 1997
 Otsuka Chemicals, Cell Technology Center lecture, Japan, 1997
 Rinshoken Institute lecture, Japan, 1997
 Guha International Research Conference, India, 1997
 Invited Speaker, International Symposium on the Biochemical Role of Glycoconjugates, Bangalore, India, 1999
 Invited Speaker, International Symposium on New Frontiers in Glyco and Lipid Biology, Japan, August, 1999
 Invited Speaker, Institute of Cell and Molecular Biology, Singapore, 1998
 Invited Speaker, Berlex Laboratories, January 6, 1998
 Invited Speaker, All India Institute of Medical Science, Delhi, India. Joint National Child and Maternal Health / India program 2000, Bethesda, USA
 Invited Speaker, International Conference on Industry/Academic interface in the new millennium, Hyderabad, India, 2000
 Invited Speaker, Dept. of Biological Chemistry, University of Delaware, 1999
 Invited Speaker, Wyeth Ayerst, 2000
 Invited speaker, Merck Research Conferences 2002
 Invited speaker, International Meeting of Glycobiology Bangalore, India 2003
 Invited speaker, Science and Technology Seminar with Indian Diaspora. Delhi, India 2003.
 Invited speaker. Gordon research Conferences in Sphingolipids and Glycolipids, Haima, Japan.
 Invited speaker. Otsuka Summer Research Symposium, Tokushima Japan, 2004.
 Invited speaker. Osaka Medical University Dept of Biochemistry, Osaka, Japan, 2004
 Invited speaker. International Conference on High Density Lipoproteins, Crete, Greece, 2004.
 Visiting Professor, Dept of Biochemistry All India Institutes of Medical Sciences, Delhi, 2005.
 Invited speaker. Indian Science Congress meeting, Ahmedabad, India, 2005.
 Invited speaker. International meeting on the roles of Glycoconjugates in eukaryotic cells. Puri, India, 2005.
 Invited speaker. International Ceramide Conference, Charlestown, USA.
 Invited speaker. XVIII International Symposium on Glycoconjugates, Florence Italy, 2005

Invited speaker, GTC Bio conference on Angiogenesis, San Diego,USA,2006.

Invited speaker, Genzyme corporation ,Boston, USA,2006

Invited speaker. World Congress of Sphingo-glyco Biology, Tokushima ,Japan,2007.

Invited speaker, IBCC congress on Drug development, Boston, USA. 2007.

Invited speaker, International meeting on the roles of Glycoconjugates, Hyderabad, India,2008.

Chair, Translational GlycoBiology XX International conference on Glycoconjugates, Puerto Rico, USA,2009

Invited Reviews, Editorials:

1. Murray RK, Chatterjee S, and Yogeewaran G: Glycosphingolipids cultured cells and neoplastic transformation. PAABS REVISTA 2: 721-728, 1973.