CURRICULUM VITAE

Parakat Vijayagopal, Ph.D.

Please provide all information in reverse chronological order

Education

Ph.D. (or highest degree)	1973	Biochemistry, University of Kerala, India
M.S.	1968	Biochemistry, Banaras Hindu University, India
B.S.	1966	Chemistry, University of Kerala, India

Dissertation

Carbohydrates in relation to atherosclerosis, 1973, and Dr. P. A. Kurup

Professional Certification/Licensure

None

Employment

September 2008- Present	Associate Professor Department of Nutrition and Food Sciences Texas Woman's University P. O. Box 425888 Denton, TX 76204
September 2007- May 2008	Visiting Associate Professor Department of Nutrition and Food Sciences Texas Woman's University P. O. Box 425888 Denton, TX 76204
July 1992 - April 2006	Professor of Medicine LSU Health Sciences Center New Orleans, Louisiana 70112
July 1987 - June 1992	Associate Professor of Medicine LSU Medical Center New Orleans, Louisiana
July 1983 - June 1987	Assistant Professor of Medicine LSU Medical Center New Orleans, Louisiana

July 1979 - June 1983	Instructor of Medicine LSU Medical Center New Orleans, Louisiana
January 1978 - June 1979	Research Associate Department of Medicine LSU Medical Center
July 1975 - Dec. 1977	Postdoctoral Fellow Department of Clinical Science Australian National University Canberra, Australia
June 1973 - June 1975	Lecturer in Biochemistry University of Kerala Trivandrum, India
Sept.1968 - May 1973	Graduate Student Department of Biochemistry University of Kerala Trivandrum, India

TEACHING

Courses Taught at TWU

Graduate
NFS6203- Advanced Laboratory Methods

Undergraduate
NFS3103- Advanced Nutrition
NFS 3101-Advanced Nutrition Laboratory
NFS4911-15- Independent Study

LSU School of Medicine- Biochemistry (Lipids and lipoprotein metabolism) 1999-2004
Core lecture to junior medical students: Mechanisms of atherogenesis (1992-2005)
Core lectures to Cardiology Fellows- different topics (2 per year; 1999-2005)

Doctoral Dissertations

Henry Ciolino- "Studies on the modulation of proteoglycan synthesis by vascular smooth muscle cells in culture"; Ph.D. awarded in 1990; chair
Kimberly Meng- "Degenerative disease of the temporomandibular joint: Structural and chemical analysis and study of a chondroprotective agent"; Ph.D. awarded in 1995; chair

John Zamjahn- "Studies of Vascular wall proteoglycans and their relationship to blood vessel susceptibility to atherosclerosis; Ph.D. awarded in 2004; chair

Doctoral Committee
Tim Lang 1990
Chris Nabors 1990
Randy Wilk 1990
Wenwu Zhang 1998
Sinju Sundaresan
Nicolle Fernandez
Shradha Sodhani
Kathleen Davis

Master's Theses
Shiwani Moghe
Jegghna Chedda
Raj Kotturu

Academic Advising Committee
Sarah Last
Cherish Kominek
Roberta Schneider
Bielca Soza

Master's Professional Papers
None

Other Scholarly Teaching, Mentoring and Curricular Achievements
MEDICAL STUDENT RESEARCH (honors project)
1993-1995- Erin Knoebel,. "Chlamydia pneumoniae: A possible role in atherogenesis". Mentors: David Martin, M.D. and Parakat Vijayagopal. Ph.D.

1993-1996- Amy Young,. "The effect of high glucose and insulin on proteoglycan synthesis and secretion by vascular smooth muscle cells". Mentors: Cutiss Cook, M.D. and Parakat Vijayagopal, Ph.D.

1995-1998- Anupama Menon,. "Biosynthesis of proteoglycans in cholesterol-enriched macrophages". Mentor: Parakat Vijayagopal,Ph.D.

2000-2002- Saul Wilson,. 'Effect of glycated LDL on proteoglycan synthesis by vascular smooth muscle cells and macrophages'. Mentor: Parakat Vijayagopal, Ph.D.

MEDICAL STUDENT SUMMER RESEARCH

1995- Lizza Delio: Proteoglycan synthesis by vascular smooth muscle cells exposed to high glucose medium.

1996- Pramod Menon: Proteoglycan metabolism in cholesterol-enriched macrophages.

1997- Tom Ewing: Effect of oxidative injury on proteoglycan synthesis by vascular endothelial cells.

1997- Rahul Thaly: Effect of Azaftig, a urinary proteoglycan on weight loss.

1998- Todd Brown: Effect of homocysteine on proteoglycan synthesis by vascular smooth muscle cells.

2000- Saul Wilson:"Modulation of vascular smooth muscle cell proteoglycan synthesis by extracellular matrix".

2001- Colin Goudelocke: Effect of Azaftig on lipolysis
James Williams: Isolation and purification of Azaftig from urine

2003- Carl Gauthier: Effect of Azaftig on lipogenesis in 3T3-L1 adipocytes

SCHOLARSHIP/CREATIVE ACHIEVEMENTS

Refereed Publications or Other Creative Achievements

Published or completed works (accepted or in press) only. Works still "in progress" should be included under the category "Scholarly Works in Progress." Give author(s) name(s) in same order as they appear in the publication.

1. Books (give author(s), title, press and date of publication)
   None

2. Chapters (give author(s), title, press, date of publication and page numbers)
   None

3. Articles (give author(s), title, journal, date and page numbers)

Vijayagopal P, Kurup PA: Effect of dietary starches on the serum, aorta and hepatic lipid levels in cholesterol-fed rats. Atherosclerosis 11:257, 1970.

Seethanathan P, Vijayagopal P, Kurup PA: Glucose uptake by the diaphragm in rats fed normal and hypercholesterolaemic diet and the effect of insulin on the uptake. Atherosclerosis 11:343, 1970.

Seethanathan P, Vijayagopal P, Augusti KT, Kurup PA: Changes in hepatic free NAD and NADP levels in rats fed a hypercholesterolaemic diet. Atherosclerosis 11:399, 1970.

Seethanathan P, Vijayagopal P, Augusti KT, Kurup PA: Myocardial lipoprotein lipase in rats fed a hypercholesterolaemic diet. Atherosclerosis 11:333, 1970.

Vijayagopal P, Kurup PA: Hypolipidaemic activity of whole paddy in rats fed a high fat-hig cholesterol diet. Atherosclerosis 15:215, 1972.

Vijayagopal P, Kurup PA: Effect of dietary starches on the serum, aorta and hepatic lipid levels in high fat-cholesterol diet fed rats. Part II - Nature of the starch and hypolipidaemic activity. Atherosclerosis 16:247, 1972.

Vijayagopal P, Kurup PA: Hypolipidaemic principles of the husk and bran of paddy - Nature of the substance and its effect on cholesterol absorption and faecal bile salts excretion in rats fed a high fat-cholesterol diet. Atherosclerosis 18:379,1973.

Vijayagopal P, Sarawathy Devi K, Kurup PA: Fiber-content of different dietary starches and their effect on the lipid levels in high fat-high cholesterol diet fed rats. Atherosclerosis 17:156, 1973.

Vijayagopal P, Nestel PJ: Metabolism of lipoproteins by human lymphocytes. Possible defect of very low density lipoprotein catabolism in subjects with hypertriglyceridemia. Artery 3:456,1977.

Vijayagopal P, Ardlie NG: Coagulant activity of human plasma lipoproteins from normal and hyperlipidaemic subjects. Thromb Res 12:721, 1978.

Vijayagopal P, Radhakrishnamurthy B, Srinivasan SR, Berenson GS: Studies of biologic properties of proteoglycans from bovine aorta. Lab Invest 42:190, 1980.

Radhakrishnamurthy B, Godofsky A, Dalferes ER Jr, Srinivasan SR,Vijayagopal P, Berenson GS: Studies of biologic properties of a polysulfated chondroitin. Proc Soc Exp Biol Med 164:410, 1980.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Decreased secretion of triacylglycerol by exogenous cholesterol in high sucrose-fed rabbits. Biochem Med 24:49, 1980.

Radhakrishnamurthy B, Dalferes ER Jr, Vijayagopal P, Berenson GS: Determination of molecular-weight distribution of aorta glycosaminoglycans by automated gelfiltration. J Chromatogr 192:307, 1980.

Vijayagopal P, Radhakrishnamurthy B, Srinivasan SR, McMurtreyJ, Berenson GS: Proteoglycan synthesis and secretion by bovine aortic tissue in organ culture. Artery 6:458, 1980.

Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr, BerensonGS: Studies of chemical composition and biologic properties of heparinoids. In Chemistry and Biology of Heparin (Lundblad RL, Brown WV,

Mann KG, Roberts HR, eds). New York, Elsevier/North Holland, Inc., 1981, pp 225-233.
Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Interaction of serum lipoproteins and a proteoglycan from bovine aorta. J Biol Chem 256:8234, 1981.
Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr, Berenson GS: Mesenchymal injury and proteoglycans of arterial wall in atherosclerosis. In Glycosaminoglycans and Proteoglycans in Physiological and Pathological Processes of Body Systems (Varma RS, Varma R, eds). Basel: Darger, 1982, pp 231-251.
Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B. Berenson GS:Hemostatic properties and serum lipoprotein binding of a heparan sulfate proteoglycan from bovine aorta. Biochim Biophys Acta 758:70, 1983.
Srinivasan SR, Vijayagopal P, Dalferes ER Jr, Abbate B, Radhakrishnamurthy B, Berenson GS: Dynamics of lipoprotein-glycosaminoglycan interactions in the atherosclerotic rabbit aorta in vivo. Biochim Biophys Acta 793:157, 1984.
Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr, Sharma C: The extracellular matrix in atherosclerosis. In Modern Aging Research, Vol 4 -Comparative Pathobiology of Major Age-Related Diseases: Current Status and Research Frontiers (Scarpelli DG, Migaki G, eds). New York, Alan R. Liss, Inc. 1984, pp 307-329.
Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr, Sharma C: Recent advances in molecular pathology: Carbohydrate-protein macromolecules and arterial wall integrity--A role in atherogenesis. Exp Molec Pathol 41:267,1984.
Vijayagopal P, Radhakrishnamurthy B, Srinivasan SR, Berenson GS: Isolation and characterization of a link protein from bovine aorta proteoglycan aggregate. Biochim Biophys Acta 839:110, 1985.
Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr: Proteoglycans and potential mechanisms related to atherosclerosis. Ann NY Acad Sci 454:69, 1985.
Vijayagopal P, Srinivasan SR, Jones KM, Radhakrishnamurthy B, Berenson GS: Complexes of low-density lipoproteins and arterial proteoglycan aggregate promote cholesteryl ester accumulation in mouse macrophages. Biochim Biophys Acta 837:251, 1985.
Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P:Arterial wall proteoglycans - Biologic properties related to pathogenesis of atherosclerosis. In Proceedings of the 7th International Atherosclerosis Symposium. Amsterdam: Elsevier, 1986.
Srinivasan SR, Vijayagopal P, Dalferes ER Jr, Abbate B, Radhakrishnamurthy B, Berenson GS: Low density lipoprotein retention by aortic tissue: Contribution of extracellular matrix. Atherosclerosis 62:201, 1986.

Srinivasan SR, Vijayagopal P, Eberle K, Dalferes ER Jr, Radhakrishnamurthy B, Berenson GS: Low density lipoprotein binding affinity of arterial wall isomeric chondroitin sulfate proteoglycans. Atherosclerosis 72:1, 1988.
Vijayagopal P, Srinivasan SR, Jones KM, Radhakrishnamurthy B, Berenson GS: Metabolism of low density lipoprotein-proteoglycan complex by macrophages: Further evidence for a receptor pathway. Biochim Biophys Acta 960:210, 1988.
Vijayagopal P, Srinivasan SR, Dalferes ER Jr, Radhakrishnamurthy B, Berenson GS: Effect of low density lipoproteins on the synthesis and secretion of proteoglycans by human endothelial cells in culture. Biochem J 255:639,1988.
Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr: Arterial Wall injury and proteoglycan changes in atherosclerosis. Arch Path Lab Med 112:1002, 1988.
Srinivasan SR, Vijayagopal P, Eberle K, Radhakrishnamurthy B, Berenson GS: Low-density lipoprotein binding affinity of arterial wall proteoglycans: Characterization of a chondroitin sulfate proteoglycan subfraction. Biochim Biophys Acta 1006:159, 1989.
Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Dalferes ER Jr: Nature and importance of proteoglycans in the atherosclerotic plaque. In Pathobiology of Human Atherosclerotic Plaque. WP Newman, SA Shaefer (Ed) pp 189 -208, 1989, New York, Springer Verlag.
Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P,BerensonGS: Role of artery wall proteoglycans in intracellular and extra-cellular low density lipoprotien cholesterol entrapment. In Atherosclerosis VIII. G Crepaldi et al (Ed) pp 95-99, 1989, Elsevier Science Publications BV.
Vijayagopal P, Srinivasan SR, Berenson GS: Factors regulating the metabolism of low density lipoprotein-proteoglycan complex in macrophages. Biochim Biophys Acta 1042:204, 1990.
Srinivasan SR, Vijayagopal P, Eberle K, Radhakrishnamurthy B, Berenson GS: Interaction of a high affinity heparin subfraction with low density lipoprotein stimulates cholesteryl ester accumulation in mouse macrophages. Biochim Biophys Acta 1081:188, 1991.
Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Berenson GS: Arterial wall proteoglycans - Biological properties related to pathogenesis of atherosclerosis. Euro Heart J 11:148, 1991.
Srinivasan SR, Radhakrishnamurthy B, Vijayagopal P, Berenson GS: Proteoglycans, lipoproteins, and atherosclerosis. In Hypercholesterolemia, hypocholesterolemia, hypertriglyceridemia, in vivo kinetics. (CL Malmendier, P.Alaupovic, and HB Brewer,Jr. eds). Adv. Exp. Med. Biol. Vol 285, New York, Plenum Press, 1991, pp 373-382.
Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Studies on the mechanism of uptake of low density lipoprotein-proteoglycan complex in macrophages. Biochim Biophys Acta 1092:291, 1991.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Lipoprotein- proteoglycan complexes from atherosclerotic lesions promote cholesteryl ester accumulation in human monocyte-macrophages. Arterioscler Thromb 12:237, 1992.

Vijayagopal P, Ciolino HP, Berenson GS: Endothelial cell-conditioned medium modulates the synthesis and structure of proteoglycans in vascular smooth muscle cells. Biochim Biophys Acta 1135:129, 1992.

Vijayagopal P, Ciolino HP, Radhakrishnamurthy B, Berenson GS: Heparin stimulates proteoglycan synthesis by vascular smooth muscle cells while suppressing cellular proliferation. Atherosclerosis 94:135, 1992.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, BerensonGS: Human monocyte-derived macrophages bind low density lipoprotein-proteoglycan complexes by a receptor different from the low density lipoprotein receptor. Biochem J 289:837,1993.

Vijayagopal P, Srinivasan SR, Ji-Hua Xu, Dalferes ER, Jr, Radhakrishnamurthy B, Berenson GS: Lipoprotein-proteoglycan complexes induce continued cholesteryl ester accumulation in foam cells from rabbit atherosclerotic lesions. J Clin Invest 91: 1011, 1993.

Srinivasan SR, Ji-Hua Xu, Vijayagopal P, Radhakrishnamurthy B, Berenson GS: Injury to the arterial wall of rabbits produces proteoglycan variants with enhanced low density lipoprotein binding property. Biocim Biophys Acta 1168:158, 1993.

Vijayagopal P. Enhanced synthesis and accumulation of proteoglycans in cholesterol-enriched arterial smooth muscle cells. Biochem J 294:603, 1993.

Lang TC, Zimny ML, Vijayagopal P:Experimentaltempromandibular joint disc perforation in the rabbit: a gross morphologic, biochemical and ultrastructural analysis. J Oral Maxillofac Surg 51:1115, 1993.

Vijayagopal P. Regulation of the metabolism of lipoprotien-proteoglycan complexes in human monocyte-derived macrophages. Biochem J 301:675, 1994.

Srinivasan SR, Xu JH, Vijayagopal P, Radhakrishnamurthy B, Berenson, GS: Low density lipoprotein binding affinity of arterial chondroitin sulfate proteoglycan modulates cholesteryl ester accumulation in macrophages. Biochim Biophys Acta 1272: 61, 1995.

Vijayagopal P, Figueroa JE, Guo Q, Fontenot JD, Tao Z: Marked alteration of proteoglycan metabolism in cholesterol-enriched human arterial smooth muscle cells. Biochem J 315: 995, 1996.

Vijayagopal P, Glancy DL: Macrophages stimulate cholesteryl ester accumulation in co-cultured smooth muscle cells incubated with lipoprotein-proteoglycan complex. Arterioscl Thromb Vascu Biol 16: 1112, 1996.

Vijayagopal P, Figueroa JE, Fontenot JE, Glancy DL: Isolation and characterization of a proteoglycan variant from human aorta exhibiting marked affinity for low density lipoprotein and its enhanced expression in atherosclerotic plaque. Atherosclerosis 127: 195, 1996.

Knoebel E, Vijayagopal P, Figueroa JE, Martin DH: In vitro growth of Chlamydipneumoniae in smooth muscle cells.Infect Immunity 65: 503, 1997.
Tao Z, Smart F, Figueroa JE, Glancy DL, Vijayagopal P:Elevated expression of proteoglycans in proliferating vascular smooth muscle cells. Atherosclerosis 135: 171,1997.
Tao Z, Smart FW, Figueroa JE, Glancy DL, Vijayagopal P: Enhanced synthesis of proteoglycans by vascular endothelial cells exposed to phorbol ester. Life Sci 61: 723,1997.
Vijayagopal P, Figueroa JE, Levine EA: Altered composition and increased endothelial cell proliferative activity of proteoglycans isolated from breast carcinoma. J Surg Oncol 68:250,1998.
Figueroa JE, Tao Z, Sarphie TG, Smart FW, Glancy DL,Vijayagopal P: Effect of hypoxia and hypoxia-reoxygenation on proteoglycan metabolism by vascular smooth muscle cells. Atherosclerosis 143: 135,1999.
Figueroa JE, Vijayagopal P, Prasad A, Schapira DV, Prasad C: Isolation, characterization, and distribution of a 24 kd proteoglycan in the urine of cachectic cancer and AIDS patients. Biochem Biophys Res Commun 254:643,1999.
Figueroa JE, Vijayagopal P, Debata C, Prasad A, Prasad P: Azaftig, a urinary proteoglycan from cachetic cancer patients, causes profound weight loss in mice. Life Sci 64:1339, 1999.
Figueroa JE, Vijayagopal P: Angiotensin II stimulates synthesis of vascular smooth muscle cell proteoglycans with enhanced low density lipoprotein binding properties. Atherosclerosis 162:261, 2002
Vijayagopal P, Figueroa JE: Proteoglycan metabolism by vascular smooth muscle cells exposed to high glucose medium (in preparation).
Vijayagopal P, Subramaniam P: Effect of calcium channel blockers on proteoglycan synthesis by vascular smooth muscle cells and low density lipoprotein-proteoglycan interaction. Atherosclerosis 157:353, 2001.
Glancy DL, Shah A, Azzam R, Abourahma A, Kropog JF, Steinman W, Asfour W, Khuri B, Patel K, Vijayagopal P: Risk factors among medically indigent women ≤ 45 years old with angiographically proven obstructive coronary arterial disease. J La state Med Soc 154:86,2002.
Figueroa JE,Vijayagopal P,Prasad C: Azaftig stimulates in vitro lipolysis by rodent and human adipocytes. Biochem Biophys Res Commun 293:847,2002
Glancy DL, Lopez-SA, Vijayagopal P: Is atherosclerosis reversible? Are we doing enough to reverse it? J La state Med Soc 154:126,2002
Figueroa JE, Oubre J, Vijayagopal P: Modulation of vascular smooth muscle cell proteoglycan synthesis by the extracellular matrix. J Cell Physiol 198:302,2004.
Vijayagopal P, Menon PV: Varied low density lipoprotein binding property of proteoglycans synthesized by vascular smooth muscle cells cultured on extracellular matrix. Atherosclerosis 178:75, 2005.

Sundaresan S, Vijayagopal P, Imrhan V, Mills N, Prasad C: A mouse model of nonalcoholic steatohepatitis. (submitted).
Zamjahn J, Glancy DL, Harrison L, Vijayagopal P: Differences in proteoglycan synthesis by blood vessels susceptible and resistant to atherosclerosis (submitted)

Non-Refereed Publications or Other Creative Achievements
None

Presentations at Professional Meetings
Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Decreased secretion of triglycerides by exogenous cholesterol in high sucrose fed rabbits. Presented at the annual meeting of the Southern Society for Clinical Investigation, Jan. 18-20, 1979. Clin Res 26(6):792A, 1978.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Decreased secretion of triglycerides by exogenous cholesterol in rabbits fed high sucrose. Poster presentation at the XIth International Congress of Biochemistry, Toronto, Canada, July 6-13, 1979.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Effect of exogenous cholesterol on the secretion of triglycerides in high sucrose-fed rabbits. Presented at the annual meeting of the American Society for Biological Chemists, Dallas, TX, 1979. Fed Proc 38:334, 1979.

Vijayagopal P, Radhakrishnamurthy B, Srinivasan SR, Berenson GS:studies of biologic properties of proteoglycans from bovine aorta. Presented at the Vth International Symposium on Atherosclerosis, Houston, TX, Nov. 6-9, 1979.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Serum lipoprotein binding and biologic properties of a proteoglycan from bovine aorta. Presented at the annual meeting of the Southern Connective Tissue Society, Athens, GA, Feb. 22-24, 1981.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Interaction of serum lipoproteins and a proteoglycan from bovine aorta. Presented at the annual meeting of the American Society for Biological Chemists, St. Louis, MO, May 31-June 4, 1981.Fed Proc 40:1829, 1981.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Chemical composition and biologic properties of a heparan sulfate proteoglycan from bovine aorta. Presented at the annual meeting of the American Society for Biological Chemists, New Orleans, LA, April 15-23, 1982. Fed Proc 41:439, 1982.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Divergent lipoprotein binding and hemostatic properties of two proteoglycans from bovine aorta. American Heart Association, 55th Scientific Sessions, Dallas, TX, Nov. 15-18, 1982. Arteriosclerosis 2:410A, 1982.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Chemical composition and biologic properties of bovine aorta heparan sulfate proteoglycan isolated by two procedures. Presented at the XIIth annual meeting of the Southern Connective Tissue Society, Birmingham, AL, May 1-3, 1983.

Srinivasan SR, Vijayagopal P, Dalferes ER Jr, Abbate B, Radhakrishnamurthy B, Berenson GS: Dynamics of lipoprotein glycosaminoglycan interactions in atherosclerotic rabbit aorta in vivo. Presented at the XIIth annual meeting of the Southern Connective Tissue Society, Birmingham, AL, May 1-3,1983.

Srinivasan SR, Vijayagopal P, Radhakrishnamurthy B, Berenson GS: Dynamics of lipoprotein-glycosaminoglycan interactions in atherosclerotic rabbit in vivo. American Heart Association, 56th Scientific Sessions, Anaheim, CA, Nov. 14-17, 1983. Arteriosclerosis 3:471A, 1983.

Vijayagopal P, Radhakrishnamurthy B, Berenson GS: Isolation of a link protein from a chondroitin sulfate-dematan sulfate proteoglycan aggregate from bovine aorta. American Society for Biological Chemists, St. Louis, MO, June 3-7, 1984. Fed Proc 43:1694, 1984.

Srinivasan SR, Vijayagopal P, Dalferes ER Jr,Radhakrishnamurthy B, Berenson GS: Aortic uptake of low density lipoproteins in vivo: Role of extracellular connective tissue matrix. American Society for Biological Chemists, St. Louis, MO, June 3-7, 1984. Fed Proc 43:1533, 1984.

Vijayagopal P, Srinivasan SR, Jones KM, Radhakrishnamurthy B, Berenson GS: Proteoglycan-lipoprotein complexes promote cholesteryl ester accumulation in macrophages. Federation of American Societies for Experimental Biology, Anaheim, CA, April 21-26, 1985. Fed Proc 44:521, 1985.

Radhakrishnamurthy B, Vijayagopal P, Srinivasan SR, Berenson GS: The nature of proteoglycan aggregates from bovine aorta. 7th International Symposium on Atherosclerosis, Melbourne, Australia, Oct. 6-10, 1985.

Berenson GS, Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P: Arterial wall proteoglycans: Bilogic properties related topatheogenesis of atherosclerosis. 7th International Symposium on Atherosclerosis, Melbourne, Australia, Oct. 6-10, 1985.

Vijayagopal P, Srinivasan SR, Jones KM, Radhakrishnamurthy B, Berenson GS: Uptake of low density lipoprotein-proteoglycan complex by macrophages. Evidence for a receptor pathway. American Federation for Clinical Research meeting, Southern Society for Clinical Investigation, New Orleans, LA, January 28-30, 1987. Clin Res 35:35A, 1987.

Vijayagopal P, Srinivasan SR, Dalferes ER Jr, Radhakrishnamurthy B, Berenson GS: Effect of low density lipoproteins on the synthesis and secretion of proteoglycans by human endothelial cells in culture. 60th Scientific Sessions of the American Heart Association, Anaheim, CA, November 16-19, 1987.

Vijayagopal P, Srinivasan SR, Dalferes ER Jr, Radhakrishnamurthy B, Berenson GS: Effect of low density lipoproteins on the synthesis and secretion of proteoglycans by human endothelial cells in culture. Soceity for Complex Carbohydrates annual meeting, Bethesda, MD, November 5-7, 1987.

Srinivasan SR, Vijayagopal P, Eberle K, Dalferes ER, Jr, Radhakrishnamurthy B, Berenson GS: Low density lipoprotein binding affinity of arterial wall proteoglycan variants. Society for Complex Carbohydrates annual meeting, Bethesda, MD, November 5-7, 1987.

Radhakrishnamurthy B, Srinivasan SR, Vijayagopal P, Berenson GS: Role of arterial wall proteoglycans in intracellular and extracellular low density lipoprotein cholesterol entrapment. 8th International Symposium on Atherosclerosis, Rome, October 9-13, 1988.

Ciolino H, Vijayagopal P, Berenson GS: Endothelial cells modulate proteoglycan synthesis by smooth muscle cells. Fed Proc 9:A306, 1989.

Ciolino H, Vijayagopal P, Berenson GS: Heparin stimulates proteoglycan synthesis by smooth muscle cells. Fed Proc 4:A2307, 1990.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Altered proteoglycan metabolism in cholesterol-loaded arterial smooth muscle cells. 9th International Symposium on atherosclerosis, Chicago, October 6-11, 1991.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Stimulation of cholesteryl ester deposition in monocyte-macrophages by lipoprotein-proteoglycan complexes from atherosclerotic lesions. Arterioscler Thromb 11:1447a, 1991.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Foam cells isolated from atherosclerotic lesions continue to accumulate cholesteryl ester when exposed to lipoprotein-proteoglycan complexes. American Heart Association 65th Scientific Sessions, New Orleans, November 16-19, 1992.

Injury to the arterial wall produces proteoglycan variants with enhanced low density lipoprotein binding ability. American Heart Association 65th Scientific Sessions, New Orleans, November 16-19, 1992.

Vijayagopal P, Srinivasan SR, Radhakrishnamurthy B, Berenson GS: Continued cholesteryl ester accumulation in foam cells induced by lipoprotein-proteoglycan complexes Southern Society for Clinical Investigation meeting, New Orleans, January 21 -23,1993.

Vijayagopal P: Lipoprotien-Proteoglycan complexes mediated foam cell formation in smooth muscle cells co-cultured with macrophages. 66th Scientific Sessions of the American Heart Association, Atlanta, November 8-11, 1993.

Tao Z, Vijayagopal P, Smart F: Enhanced sythesis of proteoglycans by activated endothelial cells. Southern Society for Clinical Investigation Meeting, New Orleans, February 3-5, 1994.

Young A, Cook C, Vijayagopal P: Response of smooth muscle cell proteoglycan synthesis to high glucase. Southern Society for Clinical Investigation Meeting, New Orleans, February 3-5,1994.

Giles TD, Vijayagopal P, Greenberg SS, Xie J, Given M: Nitricoxide (NO) production by vascular endothelial cells is suppressed by high glucose concentration. Southern Society for Clinical Investigation Meeting, New Orleans, February 3-5, 1994.

Vijayagopal P, Fontenot JE, Figueroa JE, LeBaron RG: Isolation and preliminary charecterization of a novel proteoglycan variant from human aorta exhibiting marked affinity for low density lipoprotein and its enhanced expression in atherosclerotic plaques. 67th Scientific Sessions of the American Heart Association, Dallas.November 14-17, 1994.

Figueroa JE, Vijayagopal P, Martin DH, Hall D:Chlymidia pneumoniae infection of vascular smooth muscle cells dramatically enhances proteoglycan secretion. 67th Scientific Sessions of the American Heart Association, Dallas, November 14-17, 1994.

Tao Z, Smart F, Figueroa JE, Vijayagopal P: Elevated expression of proteoglycans and CD59 in proliferating vascular smooth muscle cells. Southern Society for Clinical Investigation Meeting, New Orleans, February 2-4, 1995.

Childs DB, Figueroa JE, Vijayagopal P: Complement activation increases proteoglycan secretion in bovine smooth muscle cells. Southern Society for clinical Investigation Meeting, New Orleans, February 2-4, 1995.

Vijayagopal P, Figueroa JE, Gibson A, Guo Q, Given M, Giles TD: Angiotensin II stimulates proteoglycan synthesis by human aortic smooth muscle cells and produces a proteoglycan variant with enhanced binding ability to low density lipoproteins. 68th Scientific Sessions of the American Heart Association, Anaheim, CA, November 13-16, 1995.

Tao Z, Smart FW, Glancy DL, Vijayagopal P: Altered proteoglycan metabolism in vascular smooth muscle cells exposed to hypoxia-reoxygenation. Southern Society for Clinical Investigation Meeting, New Orleans February 1-4,1996.

Figueroa JE, Luo Q, Glancy DL, Vijayagopal P: Isolation and partial characterization of a receptor for LDL-proteoglyca complex in macrophages. 69th Scientific sessions of the American Heart Association, New Orleans, November 10-13, `1996.

Vijayagopal P, Figueroa JE, Glancy DL: Modulation of proteoglycan synthesis by high glucose medium in human aortic smooth muscle cells generates proteoglycan variants with enhanced binding ability to low density lipoprotein. 69th Scientific sessions of the American Heart Association, New Orleans, November 10-13, 1996.

Figueroa JE, Luo Q, Vijayagopal P: Isolation and characterization of a receptor for LDL-proteoglycan complex in macrophages. Southern Society for Clinical Investigation Meeting, New Orleans February 6-8, 1997.

Ewing T, Tao Z, Figueroa JE, Vijayagopal P: Effect of oxidative stress on proteoglycan synthesis by vascular endothelial cells.Southern Society for Clinical Investigation Meeting, New Orleans February 7-9, 1998.

Vijayagopal P, Figueroa JE, Prasad C: Azaftig, a novel proteoglycan that stimulates lipolysis in rodent and human adipocytes.FASAEB, New Orleans, April 2002.

Vijayagopal P, Figueroa JE: Effect of grape seed extract on proteoglycan metabolism by vascular smooth muscle cells. Southern Society for Clinical Investigattion Meeting, New Orleans, Februar 18, 2004.
Zamhajn J, Vijayagopal P: Proteglycan synthesis by blood vessels susceptible and resistant to atherosclesosis. Southern Society for Clinical Investigattion Meeting, New Orleans, February 25, 2005.

Honors and Awards

Peer review committees

NHLBI Lipoprotein Program Project Review
February 1990
University of Alabama, Birmingham
NHLBI Lipoprotein Program Project Review
September 1990
NIH, Bethesda
NIH Pathology A study section- Ad hoc reviewer 1994, 1995, 1996
American Heart Association, Louisiana Affiliate
1993 - 1997
American Heart Association, Southern Research Consortium
Peer Review Committee 2, 1998-2004
LSU Medical Center Bridge Grant review committee
October 2000-March 2005
Florida Department of Health- Biomedical Research Program 2001, 2002 and 2003

Fellowships

Australian National University, Canberra, Australia Postdoctoral fellowship-1995-1997

Grants

Current:

USDA; Bone protective mechanisms of blueberry polyphenols, 1/1/2010-12/31/2011, role: co-investigator (S. Juma, PI), $149,893.
Texas Department of Agriculture; Anti-inflammatory effects of cottonseed unsaponifiables in human cartilage cells: a cell model of osteoarthritis, 9/1/09-8/31/11, role: co-investigator (S. Juma, PI), $60,000.
None

Pending:

NIH; The role of resistant starch in weight control, 4/1/10-3/31/12, role: PI, $366,986.

Past Grant support:

Federal

NIH; RO1 Arterial wall proteoglycans and atherosclerosisis; 7/1/1987-6/30/1992; Competitive renewal, 7/1/1992-6/30/1996; 12/1/1996-11/30/2000; role:PI; total direct cost- $1,950,000
NIH; RO1 Biochemistry of arterial wall proteoglycans 7/1/80-6/30/92; Role: Co-investigator (G.S. Berenson, PI); total direct cost-$2,250,000

FOUNDATIONS

American Heart Association

Studies of Biological properties of proteoglycans from the arterial wall;, 7/1/1979-6/30/1981 (PI) $50,000
Studies of artery wall heparan sulfate proteoglycans; 7/1/1982-6/30/1984(PI); $50,000
Lipoprotein-proteoglycan interaction and atherosclerosis; 7/1/86-6/30/1988 (PI); $52,000
Proteoglycan metabolism in vascular smooth muscle cells; 7/1/1990-6/30/1992 (PI); $62,000
Effect of oxidized low density lipoprotein on proteoglycan synthesis by vascular smooth muscle cells; 7/1/1993-6/30/1995 (PI); $70,000
Effect of angiotensin II on proteoglycan synthesis and low density lipoprotein-proteoglycan interaction; 7/1/1997-6/30/1999(PI); $70,000
Modulation of vascular smooth muscle cells proteoglycan metabolism by the extracellular matrix; 7/1/2002-6/30/2004 (PI); $70,000

Cancer Association of Greater New Orleans

Arterial wall proteoglycans in the pathophysiology of breast cancer; 3/1/1995-2/28/1997 (PI); $35,000

PHARMACEUTICAL COMPANIES

Eli-Lilly: Effect of raloxifene on proteoglycan synthesis and LDL-proteoglycan interaction; 3/1/1998-2/29/2000 (PI); $60,000
Merck: Effect of simvastatin on vascular proteoglycan metabolism; 3/1/999-2/28/2001 (PI); $50,000
Pfizer: 1) Effect of calcium channel blockers on proteoglycan synthesis and LDL-proteoglycan interaction; 3/1/1997-2/28/1999 (PI); $35,000
2) Amlodipine and vascular wall proteoglycan metabolism; 3/1/2001-2/28/2003 (PI); $75,000

Scholarly Works in Progress

Vijayagopal P, Zamjahn J, Newman WP, Troxclair DA, Murray R, Strong JP: Amlodipine, a dihydropyridine calcium channel blocker, prevents atherosclerosis progression in WHHL rabbits: Possible role for vascular wall proteoglycans (in preparation).

Zamjahn JB, Glancy DL, Harrison L, Vijayagopal P: Differences in proteoglycan synthesis by blood vessels prone and resistant to atherosclerosis (submitted to Biochem Biophys Res Commun).

Other Research and Creative Achievements

PATENTS

Issued:

6274550 B1 Azaftig, a proteoglycan for monitoring cachexia and for control of obesity (Prasad C, Figueroa JE, Vijayagopal P)

Filed:

'Adipomodulin and related molecules and methods' (Prasad C, Figueroa JE, Vijayagopal P)

'Methods and compounds for the treatment of obesity and obesity-related disorders' (Prasad C, Figueroa JE, Vijayagopal P)

PROFESSIONAL SERVICE

Service Activities for the Component, College, University

UNIVERSITY SERVICE

Member-TWU Radiation Safety Committee

Alternate member-TWU Institutional Animal Care and Use CommitteeMember-TWU Graduate Research Committee

Member-NFS Graduate Admission Committee

Chair- NFS Graduate Education Committee

Member-NFS Research Enhancement and Suport Group

Service to the Profession

Membership in Professional Societies

American Society for Biochemistry and Molecular Biology

American Heart Association - Fellow, Council on Arteriosclerosis

Southern Society for Clinical Investigation

Service to professional publications

Ad hoc Reviewer:

- Atherosclerosis
- Arteriosclerosis, Thrombosis, and Vascular Biology
- Biochimica et Biophysica Acta
- Bichemical Medicine and Metabolic Biology
- Journal of Cellular Physiology
- Journal of Lipid Research
- American Journal of Pathology
- Diabetologia
- Adipocytes
- Current Topics in Neutraceutical Research

Service to the Community

Volunteer- American Heart Association
Volunteer- March of Dimes