

CURRICULUM VITAE

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EDUCATION

1977-1982	Shanghai Second Medical University, China	M.D.	Medicine
1986-1988	Univ. of Cincinnati, Cincinnati, Ohio	M.S.	Experimental Pathology
1988-1992	Univ. of Cincinnati, Cincinnati, Ohio	Ph.D.	Experimental Pathology

POST-DOCTORAL CLINICAL TRAINING

1982-1986	Resident	Internal Medicine	Shanghai Sixth Hospital
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POST-DOCTORAL RESEARCH TRAINING

1992-1993	Postdoctoral Fellow (American Heart Association Fellowship), Dept. of Pathology, Univ. of Cincinnati, Cincinnati, Ohio		
1993-1994	Postdoctoral Fellow, Division of G.I. Hormone, Dept. of Surgery Univ. of Cincinnati, Cincinnati, Ohio		

PROFESSIONAL APPOINTMENTS

1999-present	VA Principal Investigator/Research Health Scientist, Research Service, VA Medical Center, Charleston, SC		
2006-present	Associate Professor, Div. of Endocrinology, Diabetes, and Medical Genetics, Dept. of Medicine, Medical University of South Carolina, Charleston, SC		
1995-2006	Assistant Professor, Div. of Endocrinology, Diabetes, and Medical Genetics, Dept. of Medicine, Medical University of South Carolina, Charleston, SC		
1997-present	Faculty member, College of Graduate Studies, Medical University of South Carolina, Charleston, SC		

PROFESSIONAL COMMITTEE ASSIGNMENT

2005-present	Committee Member, VA Biosafety Committee, Ralph H.		
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Johnson VA Medical Center, Charleston, SC
2001-2004 Committee member, VA Research & Development Committee, Ralph H.
Johnson VA Medical Center, Charleston, SC

MEMBERSHIP

2000-present Council member, Arteriosclerosis, Thrombosis, and Vascular Biology
Council, American Heart Association
2000-present American Diabetes Association
2005- present American Physiological Society

RESEARCH INTERESTS

1. Pathogenesis of cardiovascular complications of diabetes, in particular, the roles of matrix metalloproteinase, macrophage Fc gamma receptor, peroxisome proliferator-activated receptors (PPARs), and oxidation/glycation of lipoproteins;
2. The role of matrix metalloproteinase in periodontal diseases in diabetes;
3. The role of dietary flavonoids in cardiovascular diseases.

CURRENT RESEARCH GRANTS

1. VA Merit Review grant: “Diabetes and the stability of atherosclerotic plaques”, Principal Investigator, \$211,900/year, 4/1/2007-3/31/2010.
2. NIH RO1 DE-16353: “Diabetes and periodontal gene expression”, Principal Investigator, \$213,000/year, 7/15/2005-6/30/2010.
3. Takeda Pharmaceuticals, Inc., pre-clinical grant: “The Effect of alogliptin on vascular inflammation and atherosclerosis”, Principal investigator, \$144,760/year, 2/1/2009-1/31/2010.

PREVIOUS RESEARCH GRANTS

I. Previous research grants received as a PI:

1. Post-doctoral Research Fellowship awarded by the American Heart Association: “Translational regulation of cholesterol esterase expression in pancreatic AP42J cells” (Mentor: David Y. Hui, Ph.D.), \$30,000, 7/1/1992-6/30/1993.
2. Institution Research Grant, Medical University of South Carolina: “Regulation of matrix metalloproteinase expression in endothelial cells”, Principal Investigator, \$12,000, 4/1/1998-3/31/1999.
3. Atorvastatin Research Award, Parke-Davis and Pfizer: “Oxidized LDL-activated expression of matrix metalloproteinase-1 and its role in plaque vulnerability”, Principal Investigator, \$50,000, 7/1/1999-6/30/2000.
4. VA Merit Review Grant: “Regulation of matrix metalloproteinase-1 expression by oxidized LDL”, Principal Investigator, \$96,000/year, 10/1/1999-9/30/2002.

5. American Heart Association Grant-in-aid, Mid-Atlantic Affiliate: "Signaling regulation of matrix metalloproteinase-1 expression by co-crosslinking of Fc gamma receptor I and II", Principal Investigator, \$50,000/year, 7/1/2000-6/30/2002.
6. Takeda Pharmaceutical North America, Inc.: "The effect of pioglitazone on the stability of advanced atherosclerotic plaques", Principal Investigator, \$80,000/year, 3/1/2003-2/30/2005.
7. Institutional Research Grant: "Diabetes and Periodontal Expression of MMPs and cytokines", Principal Investigator, \$17,000 from 4/1/2003-3/31/2004.
8. VA Merit Review Grant: "The effect of insulin-sensitizing thiazolidinediones on the stability of atherosclerotic plaques", Principal Investigator, \$150,000/year, 4/1/2003-3/31/2006.

II. Previous research grants received as a Co-PI:

1. NHLBI, NIH, R01-HL46815 : "Macrophage Activation and Lipoprotein Metabolism," Co-investigator (PI: Lopes-Virella M.F., MD, PhD), \$707,233 total, 12/1/98-11/30/01.
2. American Heart Association Grant-in-aid, AHA National Center: "Molecular mechanisms of LDL-receptor upregulation in cholesterol-laden cells." Co-investigator (PI: Lopes-Virella M.F. MD, PhD), \$150,000 total, 1/1/98-12/31/2001.
3. NIH, Program project: "Marker and Mechanism of Vascular Disease in Diabetes". Co-investigator (Principal Investigator: Lopes-Virella, M.F., MD, PhD). 10/1/1995-9/30/2006.

RESEARCH TRAINEES

(Serving as mentor for the following trainees)

<u>Name</u>	<u>Status</u>	<u>Present Position</u>
Minfu Xu, M.D., Ph.D.	Post-doctoral fellow 1999-2000	Post-doctoral fellow Department of Psychiatrics
Fan Fan, M.D.	Post-doctoral fellow 1999-2000	Post-doctoral fellow Dept. of Neuroscience
Daming Tang, M.D., Ph.D.	Post-doctoral fellow 2000-2001	Post-doctoral fellow University of Texas
Alejandro Maldonado, M.D.	Post-doctoral fellow 2002-2003	Physician, Clinical Center "Dr. Marcial Ríos", Mérida, Venezuela
Alena Nareika, M.D., Ph.D.	Post-doctoral fellow 2003-present	
Lauren Ball, Ph.D.	Oral Health COBRE Principal Investigator July, 2007-present	Assistant Professor of Pharmacology, MUSC
Chris Cole, DDS, MS	Fellow, Dept of Stomatology, College of Dental Med, MUSC	Private Practice, State of Tennessee

July, 2007-present

RESEARCH TRAINEES

(Serving as co-mentor with Dr. Lopes-Virella for the following trainees)

<u>Name</u>	<u>Status</u>	<u>Present Position</u>
Marina Mironova, M.D.	Post-doctoral fellow 1994-2000	East Carolina Univ.-Int Med Residency
Akira Takei, M.D.	Post-doctoral fellow 1996-98	Assistant Professor Kyushu University Fukuoka, Japan
Sinikka Koskinen, M.D	Post-doctoral fellow 1996-1999	Staff Physician University of Helsinki Hospital
Sumita Bandyopadhyay, Ph.D.	Post-doctoral fellow 1998-2000	Post-doctoral fellow, MUSC
Mitsunori Masakado, MD	Post-doctoral fellow 2000-2003	3 rd Department of Internal Medicine Kyushu University Fukuoka, Japan

GRADUATE STUDENT ADVISORY COMMITTEE

Malabika Ghosh, Ph.D., 1997.

RESEARCH ADVISOR FOR UNDERGRADUATE STUDENTS (SUMMER PROJECTS)

Aprill Dawson, Xavier University, New Orleans, Louisiana, 2001,
Lauren Thompson, Hampton University, SC, 2001,
Jocelyn Myers, Johnson C. Smith University, NC, 2002,
Cecilia Zhang, Government School, SC, 2003,
Takeyla Williams, College of Charleston, SC, 2003.
Veronica Jarido, University of Pittsburgh, 2004.
Veronica Jarido, University of Pittsburgh, 2005.
Shawan Hughes, South Carolina State University, 2006
Crystal Brown, Clemson University, 2007
Sana Li, Columbia College, 2008
Crystal Brown, Clemson University, 2008

TEACHING (POST-GRADUATE COURSE)

2002 Spring, Introduction of Epidemiology (Course Director: Deyi Zheng, MD, PhD), Department of
Biometry and Epidemiology, Medical University of South Carolina

2005-present Introduction of Molecular Endocrinology, a lecture series for clinical and research
fellows, Division of Endocrinology, Diabetes and Medical Genetics, Department of
Medicine, Medical University of South Carolina

INVITED PRESENTATIONS

“Oxidized LDL stimulates matrix metalloproteinase-1 expression in endothelium and macrophages”, 7th Southeast Lipid Conference, Atlanta, September, 1998.

“Fc gamma receptor signaling and metalloproteinase-1 expression in human U937 histiocytes”, 8th Southeast Lipid Conference, Atlanta, September, 1999.

“Regulation of matrix metalloproteinase-1 in vascular endothelial cells”, Vancouver, Canada, sponsored by the Parke-Davis and Pfizer, 2000.

“Matrix metalloproteinases and plaque rupture”, Shanghai Ninth Hospital, Shanghai, China, sponsored by Shanghai Second Medical University, March 2001.

“Regulation of matrix metalloproteinase-1 expression by inflammation agonists and antagonists”, University of Oklahoma College of Medicine, Oklahoma City, Oklahoma, November 2003.

“Regulation of MMP expression by inflammation stimulators and inhibitors”, Southeast Lipid Research Conference, Callaway Garden, Georgia, September 2005.

PUBLICATIONS

1. **Huang Y**, Hui DY. Metabolic fate of pancreas-derived cholesterol esterase in intestine. An in vitro study using Caco-2 cells. *J. Lipid Res.* 31:2029-2037, 1990.
2. **Huang Y**, Hui DY. Cholesterol esterase biosynthesis in rat pancreatic AR42J cells. Post-transcriptional activation by gastric hormones. *J. Biol. Chem.* 266:6720-6725, 1991.
3. **Huang Y**, Hui DY. Synergistic effects of bombesin and cholecystokinin on cholesterol esterase biosynthesis and secretion by AR42J cells. *Arch. Biochem. Biophys.* 310:54-59, 1993.
4. **Huang Y**, Hui DY. Increased cholesterol esterase level by cholesterol loading of rat pancreatoma cells. *Biochim Biophys Acta* 1214:317-322, 1994.
5. Balasubramaniam A, Sheriff S, Johnson ME, Prabhakaran M, **Huang Y**, Fischer JE, Chance WT. [D-Trp32] Neuropeptide Y: a competitive antagonist of NPY in rat hypothalamus. *J. Med. Chem.* 37:811-815, 1994.
6. Balasubramaniam A, Ujhelyi M, Borchers M, **Huang Y**, Zhai W, Zhou Y, Johnson M, Sheriff S, Fischer JE. Antagonistic properties of centrally truncated analogs of [D-Trp32] NPY. *J. Med. Chem.* 39:1142-1147, 1996.
7. Li F, **Huang Y**, Hui DY. Bile salt-stimulated cholesterol esterase increases uptake of high density lipoprotein-associated cholesteryl esters by HepG2 cells. *Biochemistry*, 35:6657-6663, 1996.
8. **Huang Y**, Fischer JE, Balasubramaniam A. Amylin mobilizes intracellular calcium through exclusive receptors on rat pancreatic AR42J cell line. *Peptides* 17:497-502, 1996.
9. Balasubramaniam A, Zhai W, Tao Z, **Huang Y**, Fischer JE, Eden P, Taylor JE, Kar L, Samarasinghe

SD, Johnson ME. Synthesis, structure and antagonistic properties of Des-Asn²⁹[D-Trp^{28,32}]NPY(27-36). *Peptides* 17:1113-1118, 1996.

10. **Huang Y**, Ghosh M, Lopes-Virella MF. Transcriptional and post-transcriptional regulation of LDL receptor gene expression in PMA-treated THP-1 cells by LDL-containing immune complexes. *J. Lipid Research* 38:110-120, 1997.
11. **Huang Y**, Ayad J, Koskinen S, Takei A, Lopes-Virella MF. Oxidized LDL-containing immune complexes induce Fc gamma receptor I-mediated mitogen-activated protein kinase activation in THP-1 macrophages. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 19:1600-1607, 1999.
12. **Huang Y**, Mironova M, Lopes-Virella MF. Oxidized LDL stimulates matrix metalloproteinase-1 expression in human vascular endothelial cells. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 19:2640-2647, 1999.
13. **Huang Y**, Fleming AJ, Wu S, Virella G, Lopes-Virella MF. Fc gamma receptor cross-linking by immune complexes induces matrix metalloproteinase-1 in U937 cells via mitogen-activated protein kinase cascade. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 20:2533-2538, 2000.
14. Klein R, Ascencao JL, Mironova M, **Huang Y**, Lopes-Virella MF. Effect of inflammatory cytokines on the metabolism of low density lipoproteins by human vascular endothelial cells. *Metabolism* 50:99-106, 2001.
15. Takei A, **Huang Y**, Lopes-Virella MF. Intercellular adhesion molecule-1 (ICAM-1) expression induced by oxLDL on human umbilical vein endothelial cells (HUVEC) depends on the stage of LDL oxidation. *Atherosclerosis* 154:79-86, 2001.
16. **Huang Y**, Song L, Wu S, Fan F, Lopes-Virella MF. Oxidized LDL differentially regulates MMP-1 and TIMP-1 expression in human vascular endothelial cells. *Atherosclerosis* 156:119-125, 2001.
17. Song L, Lopes-Virella MF, and **Huang Y**. Quercetin inhibits oxidized LDL-stimulated matrix metalloproteinase-1 expression in endothelium by blocking extracellular signal regulated protein kinase. *Archives of Biochemistry and Biophysics* 391:72-78, 2001.
18. Anderson F, Xu M, Game BA, Atchley D, Lopes-Virella MF, **Huang Y**. IFN- γ pre-treatment augments immune complex-induced matrix metalloproteinase-1 expression in U937 histiocytes. *Clinical Immunology* 102:200-207, 2002.
19. **Huang Y**, Fu Y, Bandyopadhyay S, Virella G, Lopes-Virella MF. LDL Immune Complexes Stimulate Low Density Lipoprotein Receptor Expression in U937 Histiocytes via Extracellular Signal-Regulated Kinase and AP-1. *Journal of Lipid Research* 44:1315-1321, 2003.
20. Game BA, Tang D, Minfu Xu, Lopes-Virella MF, **Huang Y**. Regulation of MMP-1 expression in vascular endothelial cells by insulin-sensitizing thiazolidinediones. *Atherosclerosis* 169:235-243, 2003.
21. Maldonado A, Game BA, Song L, **Huang Y**. Upregulation of matrix metalloproteinase-1 expression in U937 cells by LDL-containing immune complexes requires the AP-1 and Ets Motifs in the distal and the proximal promoter region. *Immunology* 109:572-579, 2003.

22. Williams TN, Zhang C, Game BA, He L, **Huang Y**. C-reactive protein stimulates MMP-1 expression in U937 histiocytes through Fc γ RII and ERK pathway. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 24:61-66, 2004.
23. Maldonado A, He L, Game BA, Nareika A, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y**. Pre-Exposure to High Glucose Augments Lipopolysaccharide-Stimulated Matrix Metalloproteinase-1 Expression by Human U937 Histiocytes. *Journal of Periodontal Research* 39, 415-423, 2004.
24. Game BA, Maldonado A, **Huang Y**. Pioglitazone inhibits MMP-1 expression in vascular smooth muscle cells through a mitogen-activated protein kinase-independent mechanism. *Atherosclerosis* 178:249-256, 2005.
25. Kraml PJ, Klein RL, **Huang Y**, Nareika A, Lopes-Virella MF. Iron Loading Increases Cholesterol Accumulation and Macrophage Scavenger Receptor-I Expression in THP-I Mononuclear Phagocytes. *Metabolism* 54:453-459, 2005.
26. Song W, Barth JL, Lu K, Yu Y, **Huang Y**, Gittinger CK, Argraves WS, Lyons TJ. Effects of oxidized and glycated LDL on gene expression in human retinal capillary pericytes, *Investigative Ophthalmology & Visual Science*, 46:2974-2982, 2005.
27. Song W, Barth JL, Lu K, Yu Y, **Huang Y**, Gittinger CK, Argraves WS, Lyons TJ. Effects of modified low-density lipoproteins on human retinal pericyte survival. *Ann NY Acad Sci*. 1043:390-395, 2005.
28. Nareika A, He L, Game BA, Slate EH, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y**. Sodium lactate increases LPS-stimulated MMP and cytokine expression in U937 histiocytes by enhancing AP-1 and NF κ B transcriptional activities. *American Journal of Physiology (Endocrinology and Metabolism)* 289:E534-E542, 2005.
29. He L, Game BA, Nareika A, Garvey WT, **Huang Y**. Administration of Pioglitazone in Low-Density Lipoprotein Receptor-Deficient Mice Inhibits Lesion Progression and MMP Expression in Advanced Atherosclerotic Plaques. *Journal of Cardiovascular Pharmacology* 48:212-222, 2006.
30. Nareika A, Maldonado A, He L, Game BA, Slate EH, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y**. High Glucose-Boosted Inflammatory Responses to Lipopolysaccharide Are Suppressed by Statin. *Journal of Periodontal Research* 42:31-38, 2006.
31. Game BA, He L, Jarido V, Nareika A, Jaffa AA, Lopes-Virella MF, **Huang Y**. Pioglitazone inhibits connective tissue growth factor expression in advanced atherosclerotic plaques in low-density lipoprotein receptor-deficient mice. *Atherosclerosis* 192:85-91, 2007.
32. Barth JL, Yu Y, Song W, Lu K, Dashti A, **Huang Y**, Argraves WS, Lyons TJ. Oxidised, glycated LDL selectively influences tissue inhibitor of metalloproteinase-3 gene expression and protein production in human retinal capillary pericytes. *Diabetologia* 50:2200-2208, 2007.
33. Cole CM, Sundararaj KP, Leite RS, Nareika A, Slate EH, Sanders JJ, Lopes-Virella MF, **Huang Y**. A trend of increase in periodontal IL-6 expression across patients with neither diabetes nor periodontal disease, patients with periodontal disease alone, and patients with both diseases. *Journal of Periodontal Research* 43:717-722, 2008.

34. Nareika A, Im Y, Game BA, Slate EH, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y**, High glucose enhances lipopolysaccharide-stimulated CD14 expression in U937 mononuclear cells by increasing NFκB and AP-1 activities, *Journal of Endocrinology* 196:45-55, 2008.
35. Sundararaj KP, Samuvel DJ, Li Y, Nareika A, Slate EH, Sanders JJ, Lopes-Virella MF, **Huang Y**. Simvastatin suppresses LPS-induced MMP-1 expression in U937 mononuclear cells by inhibiting protein isoprenylation-mediated ERK activation, *Journal of Leukocyte Biology*,84:1120-1129, 2008.
36. Nareika A, Sundararaj KP, Im Y, Game BA, Lopes-Virella MF, **Huang Y**. High glucose and interferon gamma synergistically stimulate MMP-1 expression in U937 macrophages by increasing transcription factor STAT1 activity. *Atherosclerosis*, 202:363-371, 2009.
37. Samuvel DJ, Sundararaj KP, Nareika A, Lopes-Virella MF, **Huang Y**. Lactate boosts TLR4 signaling and NFκB pathway-mediated gene transcription in macrophages via monocarboxylate transporters and MD-2 upregulation. *Journal of Immunology* 182:2476-2484, 2009.
38. Sundararaj KP, Samuvel DJ, Li Y, Sanders JJ, Lopes-Virella MF, **Huang Y**. IL-6 released from fibroblasts is essential for upregulation of MMP-1 expression by U937 macrophages in coculture - Crosstalking between fibroblasts and U937 macrophages exposed to high glucose. In press, *Journal of Biological Chemistry*, 2009 (Published online on 3/23/09).

PRESENTATIONS AND ABSTRACTS

Hui DY, **Huang Y**. Cholesterol esterase mediated uptake of high density lipoprotein-associated cholesteryl esters by HepG2 cells. *Arteriosclerosis* 9:711a, 1989, presented to the 62nd National Meeting of the American Heart Association.

Huang Y, Hui DY. Post-transcriptional regulation of cholesterol esterase gene expression. *Arteriosclerosis* 10:786a, 1990, Presented to the 63rd National Meeting of the American Heart Association.

Huang Y, Hui DY. Cholecystokinin regulation of cholesterol esterase biosynthesis in a rat pancreatic tumor cell line. *FASEB J.* 4:A1747, 1990.

Brodth-Epplly J, **Huang Y**, Hui DY. Protein kinase C-dependent cholecystokinin activation of pancreatic cholesterol esterase biosynthesis. *FASEB J.* 8:A1309, 1994, Presented to the 67th National Meeting of the American Heart Association.

Huang Y, Fischer JE, Balasubramaniam A. Des-AA7-24[D-Ala5, Aoc6, D-Trp32] NPY & Des-Asn29[D-Trp28,32]NPY (27-36): Y-1 receptor antagonists. 76th Endocrine Society Annual Meeting, Program & Abstracts, p604, 1994, Presented to the 76th National Meeting of the Endocrine Society.

Ghosh M, **Huang Y** and Lopes-Virella MF. Modified LDL-immune complexes upregulates macrophage scavenger receptors in THP-1 cells. American Heart Association 69th Scientific Sessions, New Orleans, LA, November 10-13, 1996.

Huang Y, Ghosh M and Lopes-Virella MF: Transcriptional and post-transcriptional regulation of the LDL receptor gene in THP-1 cells stimulated by LDL-IC. American Heart Association 69th Scientific Sessions, New Orleans, LA, November 10-13, 1996.

Huang Y, Ghosh M and Lopes-Virella MF: Massive increase in ACAT activity induced by Fc receptor mediated uptake of LDL-IC. American Heart Association 69th Scientific Sessions, New Orleans, LA, November 10-13, 1996.

Huang Y, Nussbaum N and Lopes-Virella MF: Oxidized LDL-containing immune complexes induce mitogen-activated protein kinase phosphorylation in human macrophages. *J. Invest. Med.* 46:232A, 1998. Presented at the Biomedicine'98 National Meeting, Washington, DC, May 1-3, 1998.

Takei A, **Huang Y** and Lopes-Virella MF: Intercellular adhesion molecule-1 (ICAM-1) expression induced by oxLDL on human umbilical vein endothelial cells (HUVEC) depends on the stage of LDL oxidation. Presented at the American Diabetes Association Annual Meeting, Chicago, IL, 1998.

Huang Y and Maria Lopes-Virella. Oxidized LDL stimulates matrix metalloproteinase-1 expression in endothelium and macrophages. Presented at the 7th Southeast Lipid Conference, Atlanta, September 10-13, 1998.

Huang Y, Mironova M and Lopes-Virella MF: Oxidized LDL stimulates matrix metalloproteinase-1 expression in human vascular endothelial cells. *Circulation (supplement)*, 17:I-813, 1998. presented at the 71st American Heart Association Scientific Sessions, Dallas, November 8-11, 1998.

Lopes-Virella MF, Takei A, Crawford A, and **Huang Y**. Advanced glycation end-products-LDL stimulates adhesion molecule expression by human aortic endothelial cells. *Diabetes (supplement 1)* 48:A31, 1999. Presented at the 59th American Diabetes Association Scientific Sessions, June 19-22, 1999.

Huang Y and Lopes-Virella MF. Fc gamma receptor signaling and metalloproteinase-1 expression in human U937 histiocytes. Presented at the 8th Southeast Lipid Conference, Atlanta, September 9-12, 1999.

Huang Y, Shan Wu, Fleming AJ, Virella G, and Lopes-Virella, MF. LDL-containing immune complexes induce macrophage metalloproteinase-1 expression via activation of a Fc gamma receptor I-linked mitogen-activated protein kinase pathway. *Circulation (supplement)*, 18:I-252, 1999. Presentation at the 72nd American Heart Association Scientific Sessions in Atlanta, Georgia, November 7-10, 1999.

Christov SM, Klein RL, **Huang Y**, Best JD, Lyons TJ, Jenkins AJ. Comparison of native versus modified LDL and Lp(a) on total and ester cholesterol accumulation by macrophages derived from THP-1 monocytes. Presented at the First Conference on Arteriosclerosis, Thrombosis, and Vascular Biology. Denver, Colorado, May 20-22, 2000.

Xu M, Game BA, Lopes-Virella MF, **Huang Y**. Insulin sensitizer troglitazone stimulates matrix metalloproteinase-1 expression in human vascular endothelial cells. Presented at the American Diabetes Association 61st Scientific Sessions, Philadelphia, PA, 2001. *Diabetes* 50 (Supplement 2): A170, 2001.

Game BA, Lopes-Virella MF, **Huang Y**. PPAR gamma ligand 9-HODE and troglitazone stimulate matrix metalloproteinase-1 expression in vascular endothelial cells via extracellular signal-regulated kinase. Presented at the American Heart Association Arteriosclerosis, Thrombosis, and Vascular Biology Conference, Salt Lake City, 2002.

Game BA, Tang D, Lopes-Virella MF, **Huang Y**. Inhibition of total protein synthesis by troglitazone

through eIF4E leads to blocking of MMP-1 translation in endothelial cells despite a marked increase in MMP-1 mRNA. Presented at the American Diabetes Association 62nd Annual Meeting, San Francisco, CA, 2002.

Song W, **Huang Y**, Barth JL, Jenkins AJ, Jaffa AA, Gittinger CK, Argraves WS, Lyons WT. Effects of modified LDL on gene expression by human retinal capillary pericytes. Presented at the American Diabetes Association 62nd Annual Meeting, San Francisco, CA, 2002.

Game BA, Maldonado A, Tang D, **Huang Y**. Pioglitazone inhibits oxidized LDL-stimulated matrix metalloproteinase-1 expression in human vascular smooth muscle cells. Presented at the South Carolina Diabetes Conference, North Charleston Convention Center, South Carolina, September 2002.

Game BA, Maldonado Poyato A, Lopes-Virella MF, **Huang Y**. Crosslinking of Fc gamma receptor I and II synergistically stimulates extracellular signal-regulated kinase that induces AP-1 and Ets-mediated matrix metalloproteinase-1 expression in U937 histiocytes. Presented at the American Heart Association 75th Scientific Sessions, Chicago, IL, November 17-20, 2002.

Game BA, Maldonado A, **Huang Y**. Pioglitazone inhibits oxidized LDL-stimulated matrix metalloproteinase-1 expression in human vascular smooth muscle cells through a mitogen-activated protein kinase-independent mechanism. *Diabetes* 2003;52:A20. Presented at the American Diabetes Association 63rd Scientific Sessions, New Orleans, LA, 2003.

He L, Maldonado A, **Huang, Y**. Pre-Exposure of U937 Histiocytes to High Glucose Augments LPS-Stimulated Cytokine and Chemokine Expression. American Diabetes Association 64th Scientific Sessions 2084-PO, Orlando, FL, 2004.

Song W, **Huang Y**, Lu K, Barth JL, Argraves S, Lyons T. Heavily-Oxidized-Glycated LDL Inhibits TIMP-3 Expression in Human Retinal Capillary Pericytes. American Diabetes Association 64th Scientific Sessions 898-P, Orlando, FL, 2004.

Lu K, Song W, **Huang Y**, Barth J, Argraves S, Lyons TJ. Effect of native LDL and modified LDL on mRNA expression of genes involved in lipid metabolism in human retinal pericytes. American Diabetes Association 64th Scientific Sessions 1084-P, Orlando, FL, 2004.

He L, Game BA, Garvey WT, **Huang Y**. Administration of Pioglitazone to LDL Receptor-Deficient Mice Inhibits Progression of Intimal Lesions and Expression of Matrix Metalloproteinases and Adhesion Molecules. American Diabetes Association 65th Scientific Sessions 738-P, San Diego, CA, 2005. Abstract published in *Diabetes* 54 (Supplement 1), A182, 2005.

Game BA, He L, Jarido V, Jaffa AA, Lopes-Virella MF, **Huang Y**. Pioglitazone Inhibits Connective Tissue Growth Factor Expression during the Progression of Aortic Atherosclerotic Plaques in LDL Receptor-Deficient Mice. American Diabetes Association 65th Scientific Sessions 750-P, San Diego, CA, 2005. Abstract published in *Diabetes* 54 (Supplement 1), A184, 2005.

Nareika A, He L, Game BA, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y**. Sodium Lactate and Lipopolysaccharide Exert Synergistic Effect on MMP and Cytokine Expression in U937 Histiocytes through NF κ B and MAPK Pathways. American Diabetes Association 65th Scientific Sessions 1287-P, San Diego, CA, 2005. Abstract published in *Diabetes* 54 (Supplement 1), A313, 2005.

Nareika A, Maldonado A, He L, Game BA, Slate EH, Sanders JJ, London SD, Lopes-Virella MF,

Huang Y. High Glucose-Boosted Innate Inflammatory Responses to Lipopolysaccharide Are Suppressed by Statin, Presented at American Diabetes Association 66th Scientific Session, Washington, DC, June 9-13, 2006. Abstract published in Diabetes 55 (Supplement 1), A160, 2006.

Nareika A, Im Y, Game BA, Slate EH, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y.** High Glucose Enhances Lipopolysaccharide-Induced CD14 Expression in U937 Histiocytes. Presented at American Diabetes Association 66th Scientific Session, Washington, DC, June 9-13, 2006. Abstract published in Diabetes 55 (Supplement 1), A171, 2006.

Nareika A, Game BA, Sanders JJ, Lopes-Virella MF, **Huang Y.** High glucose augments LPS-stimulated MMP-1 expression in human monocyte-derived macrophages. American Diabetes Association Scientific Sessions, March 21-24, 2007, New Orleans, LA.

Nareika A, Game BA, Sanders JJ, London SD, Lopes-Virella MF, **Huang Y.** A new method to quantify MMP-8 in oral rinse samples. American Diabetes Association Scientific Sessions, March 21-24, 2007, New Orleans, LA.

Nareika A, Game BA, Lopes-Virella MF, **Huang Y.** High glucose augments IFN gamma-stimulated matrix metalloproteinase-1 expression in U937 macrophages by enhancing STAT-1 activity. American Heart Association Arteriosclerosis, Thrombosis, and Vascular Biology Annual Conference, April 19-21, 2007, Chicago, IL.

Christine M. Cole, Kamala P. Sundararaj, Renata S. Leite, Alena Nareika, Elizabeth H. Slate, John J. Sanders, Maria F. Lopes-Virella, **Yan Huang.** Periodontal IL-6 Expression in Diabetic and Nondiabetic Patients. American Association of Dental Research Annual Meeting, Dallas, TX, April 2-5, 2008.

Sundararaj KP, Li Y, Samuvel DJ, Nareika A, Lopes-Virella MF, **Huang Y.** Simvastatin Suppresses LPS-Induced MMP-1 Expression in U937 Mononuclear Cells by Inhibiting Ras and Rac Protein Isoprenylation-mediated ERK Activation. Accepted for presentation at American Heart Association Atherosclerosis, Thrombosis and Vascular Biology annual meeting in Atlanta, Georgia, April 16-18, 2008.

Sundararaj KP, Samuvel DJ, Li Y, Slate EH, Sanders JJ, Lopes-Virella MF, **Huang Y.** High glucose enhances fibroblast-mononuclear cell co-culture-boosted MMP-1 expression. Accepted for presentation at 68th American Diabetes Association Scientific Sessions in San Francisco, CA, June 6-10, 2008.