

Inflammation & Coronary Artery Disease

Bibliography of One Hundred Key Papers

selected by **Peter Libby, MD**

*Leducq Center for Cardiovascular Research - Brigham and Women's Hospital
Harvard Medical School - Boston, Mass - USA*

- | | |
|---|---|
| Aikawa M, Rabkin E, Okada Y, et al. | <i>Lipid lowering by diet reduces matrix metalloproteinase activity and increases collagen content of rabbit atheroma: a potential mechanism of lesion stabilization.</i>
Circulation. 1998;97:2433-2444. |
| Aikawa M, Voglic SJ, Sugiyama S, et al. | <i>Dietary lipid lowering reduces tissue factor expression in rabbit atheroma.</i>
Circulation. 1999;100:1215-1222. |
| Amento EP, Ehsani N, Palmer H, Libby P. | <i>Cytokines and growth factors positively and negatively regulate interstitial collagen gene expression in human vascular smooth muscle cells.</i>
Arterioscler Thromb. 1991;11:1223-1230. |
| Arend WP. | <i>Interleukin 1 receptor antagonist. A new member of the interleukin 1 family.</i>
Clin Invest. 1991;88:1445-1451. |
| Barrington R, Zhang M, Fischer M, Carroll MC. | <i>The role of complement in inflammation and adaptive immunity.</i>
Immunol Rev. 2001;180:5-15. |
| Bazzoni F, Beutler B. | <i>The tumor necrosis factor ligand and receptor families.</i>
N Engl J Med. 1996;334:1717-1725. |
| Belton O, Byrne D, Kearney D, Leahy A, Fitzgerald DJ. | <i>Cyclooxygenase-1 and -2-dependent prostacyclin formation in patients with atherosclerosis.</i>
Circulation. 2000;102:840-845. |
| Berliner J, Leitinger N, Watson A, Huber J, Fogelman A, Navab M. | <i>Oxidized lipids in atherogenesis: formation, destruction and action.</i>
Thromb Haemost. 1997;78:195-199. |
| Bevilacqua MP, Pober JS, Majeau GR, Cotran RS, Gimbrone MA Jr. | <i>Interleukin-1 acts on cultured human vascular endothelium to increase the adhesion of polymorphonuclear leukocytes, monocytes and related leukocyte cell lines.</i>
J Clin Invest. 1985;76:2003-2011. |
| Bini A, Kudryk BJ. | <i>Fibrinogen in human atherosclerosis.</i>
Ann N Y Acad Sci. 1995;748:461-471. |
| Brown MS, Goldstein JL. | <i>Lipoprotein metabolism in the macrophage: implications for cholesterol deposition in atherosclerosis.</i>
Annu Rev Biochem. 1983;52:223-261. |
| Burke AP, Farb A, Malcom GT, Liang Y, Virmani R. | <i>Effect of risk factors on the mechanism of acute thrombosis and sudden coronary death in women.</i>
Circulation. 1998;97:2110-2116. |

Bibliography of One Hundred Key Papers

- Bustos C, Hernandez-Presa MA, Ortego M, et al.** *HMG-CoA reductase inhibition by atorvastatin reduces neointimal inflammation in a rabbit model of atherosclerosis.*
J Am Coll Cardiol. 1998;32:2057-2064.
-
- Catella-Lawson F, McAdam B, Morrison BW, et al.** *Effects of specific inhibition of cyclooxygenase-2 on sodium balance, hemodynamics, and vasoactive eicosanoids.*
J Pharmacol Exp Ther. 1999;289:735-741.
-
- Chernyak L, Tauber AI.** *The birth of immunology: Metchnikoff, the embryologist.*
Cell Immunol. 1988;117:218-233.
-
- Clark WR.** *Immunology. The hole truth about perforin.*
Nature. 1994;369:16-17.
-
- Clinton SK, Underwood R, Sherman ML, Kufe DW, Libby P.** *Macrophage-colony stimulating factor gene expression in vascular cells and in experimental and human atherosclerosis.*
Am J Pathol. 1992;140:301-316.
-
- Collins T, Cybulsky MI.** *NF-kappaB: pivotal mediator or innocent bystander in atherogenesis?*
J Clin Invest. 2001;107:255-264.
-
- Collins T, Korman AJ, Wake CT, et al.** *Immune interferon activates multiple class II major histocompatibility complex genes and the associated invariant chain gene in human endothelial cells and dermal fibroblasts.*
Proc Natl Acad Sci USA. 1984;81:4917-4921.
-
- Cybulsky MI, Iiyama K, Li H, et al.** *A major role for VCAM-1, but not ICAM-1, in early atherosclerosis.*
J Clin Invest. 2001;107:1255-1262.
-
- Danesh J, Collins R, Peto R.** *Chronic infections and coronary heart disease: is there a link?*
Lancet. 1997;350:430-436.
-
- Davies MJ.** *Stability and instability: the two faces of coronary atherosclerosis. The Paul Dudley White Lecture, 1995.*
Circulation. 1995;94:2013-2020.
-
- Dinarello CA.** *Interleukin-1.*
Cytokine Growth Factor Rev. 1997;8:253-265.
-
- Dinarello CA.** *Proinflammatory cytokines.*
Chest. 2000;118:503-508.
-
- Dinarello CA, Ikejima T, Warner SJC, et al.** *Interleukin-1 induces interleukin-1. I. Induction of circulating interleukin-1 in rabbits in vivo and in human mononuclear cells in vitro.*
J Immunol. 1987;139:1902-1910.
-
- Dinarello CA, Pomerantz BJ.** *Proinflammatory cytokines in heart disease.*
Blood Purif. 2001;19:314-321.
-
- Dollery CM, McEwan JR, Henney AM.** *Matrix metalloproteinases and cardiovascular disease.*
Circ Res. 1995;77:863-868.
-
- Drake TA, Morrissey JH, Edgington TS.** *Selective cellular expression of tissue factor in human tissues. Implications for disorders of hemostasis and thrombosis.*
Am J Pathol. 1989;134:1087-1097.
-
- Ducharme A, Frantz S, Aikawa M, et al.** *Targeted deletion of matrix metalloproteinases-9 attenuates left ventricular enlargement and collagen accumulation after experimental myocardial infarction.*
J Clin Invest. 2000;106:55-62.
-



-
- Fadok VA, Henson PM.** *Apoptosis: getting rid of the bodies.*
Curr Biol. 1998;8:R693-R695.
-
- Falk E, Shah P, Fuster V.** *Coronary plaque disruption.*
Circulation. 1995;92:657-671.
-
- Febbraio M, Podrez EA, Smith JD, et al.** *Targeted disruption of the class B scavenger receptor CD36 protects against atherosclerotic lesion development in mice.*
J Clin Invest. 2000;105:1049-1056.
-
- FitzGerald GA, Austin S, Egan K, Cheng Y, Pratico D.** *Cyclo-oxygenase products and atherothrombosis.*
Ann Med. 2000;32(suppl 1):21-26.
-
- Frenette P, Wagner D.** *Adhesion molecules—Part 1.*
N Engl J Med. 1996;334:1526-1529.
-
- Galis Z, Sukhova GK, Kranzhöfer R, Clark S, Libby P.** *Macrophage foam cells form experimental atheroma constitutively produce matrix-degrading proteinases.*
Proc Natl Acad Sci USA. 1995;92:402-406.
-
- Galis Z, Sukhova GK, Lark MW, Libby P.** *Increased expression of matrix metalloproteinases and matrix degrading activity in vulnerable regions of human atherosclerotic plaques.*
J Clin Invest. 1994;94:2493-2503.
-
- Geng YJ, Henderson LE, Levesque EB, Muszynski M, Libby P.** *Fas is expressed in human atherosclerotic intima and promotes apoptosis of cytokine-primed human vascular smooth muscle cells.*
Arterioscler Thromb Vasc Biol. 1997;17:2200-2208.
-
- Geng YJ, Libby P.** *Evidence for apoptosis in advanced human atheroma. Co-localization with interleukin-1 β -converting enzyme.*
Am J Pathol. 1995;147:251-266.
-
- Geng YJ, Wu Q, Muszynski MW, Hansson GK, Libby P.** *Apoptosis of vascular smooth muscle cells induced by in vitro stimulation with interferon-gamma, tumor necrosis factor-alpha, and interleukin-1-beta.*
Arterioscler Thromb Vasc Biol. 1996;16:19-27.
-
- Gerard C, Rollins BJ.** *Chemokines and disease.*
Nat Immunol. 2001;2:108-115.
-
- Hajjar DP, Haberland ME.** *Lipoprotein trafficking in vascular cells. Molecular Trojan horses and cellular saboteurs.*
J Biol Chem. 1997;272:22975-22978.
-
- Han J, Hajjar DP, Tauras JM, Nicholson AC.** *Cellular cholesterol regulates expression of the macrophage type B scavenger receptor, CD36.*
J Lipid Res. 1999;40:830-838.
-
- Hansson G, Libby P.** *The role of the lymphocyte. In: Fuster V, Ross R, Topol E, eds. Atherosclerosis and Coronary Artery Disease.* New York, NY: Lippincott-Raven; 1996:557-568.
-
- Henney AM, Wakeley PR, Davies MJ, et al.** *Localization of stromelysin gene expression in atherosclerotic plaques by in situ hybridization.*
Proc Natl Acad Sci USA. 1991;88:8154-8158.
-

Bibliography of One Hundred Key Papers

- Homeister JW, Zhang M, Frenette PS, et al.** *Overlapping functions of E- and P-selectin in neutrophil recruitment during acute inflammation.*
Blood. 1998;92:2345-2352.
-
- Imler JL, Hoffmann JA.** *Toll receptors in innate immunity.*
Trends Cell Biol. 2001;11:304-311.
-
- Jiang C, Ting AT, Seed B.** *PPAR-gamma agonists inhibit production of monocyte inflammatory cytokines.*
Nature. 1998;391:82-86.
-
- Jonasson L, Holm J, Skalli O, Bondjers G, Hansson GK.** *Regional accumulations of T cells, macrophages, and smooth muscle cells in the human atherosclerotic plaque.*
Arteriosclerosis. 1986;6:131-138.
-
- Kimbrell DA, Beutler B.** *The evolution and genetics of innate immunity.*
Nat Rev Genet. 2001;2:256-267.
-
- Kol A, Libby P.** *The mechanisms by which infectious agents may contribute to atherosclerosis and its clinical manifestations.*
Trends Cardiovasc Med. 1998;8:191-199.
-
- Krieger M.** *The other side of scavenger receptors: pattern recognition for host defense.*
Curr Opin Lipidol. 1997;8:275-280.
-
- Kume N, Cybulsky MI, Gimbrone MA Jr.** *Lysophosphatidylcholine, a component of atherogenic lipoproteins, induces mononuclear leukocyte adhesion molecules in cultured human and rabbit arterial endothelial cells.*
J Clin Invest. 1992;90:1138-1144.
-
- Le JM, Vilcek J.** *Interleukin 6: a multifunctional cytokine regulating immune reactions and the acute phase protein response.*
Lab Invest. 1989;61:588-602.
-
- Lee R, Libby P.** *The unstable atheroma.*
Arterioscler Thromb Vasc Biol. 1997;17:1859-1867.
-
- Liao F, Lusis AJ, Berliner JA, et al.** *Serum amyloid A protein family. Differential induction by oxidized lipids in mouse strains.*
Arterioscler Thromb. 1994;14:1475-1479.
-
- Libby P.** *Changing concepts of atherogenesis.*
J Intern Med. 2000;247:349-358.
-
- Libby P, Egan D, Skarlatos S.** *Roles of infectious agents in atherosclerosis and restenosis: an assessment of the evidence and need for future research.*
Circulation. 1997;96:4095-4103.
-
- Libby P, Geng YJ, Aikawa M, et al.** *Macrophages and atherosclerotic plaque stability.*
Curr Opin Lipidol. 1996;7:330-335.
-
- Libby P, Ridker PM.** *Novel inflammatory markers of coronary risk: theory versus practice.*
Circulation. 1999;100:1148-1150.
-
- Libby P, Ross R.** *Cytokines and growth regulatory molecules. In: Fuster V, Ross R, Topol E, eds.*
Atherosclerosis and Coronary Artery Disease. New York, NY: Lippincott-Raven: 1996:585-594.
-



-
- Libby P, Simon DI.** *Inflammation and thrombosis: the clot thickens.*
Circulation. 2001;103:1718-1720.
-
- Liuzzo G, Biasucci LM, Gallimore JR, et al.** *The prognostic value of C-reactive protein and serum amyloid a protein in severe unstable angina.*
N Engl J Med. 1994;331:417-424.
-
- Loppnow H, Libby P.** *Proliferating or interleukin 1-activated human vascular smooth muscle cells secrete copious interleukin 6.*
J Clin Invest. 1990;85:731-738.
-
- Loskutoff DJ, Van Mourik JA, Erickson LA, Lawrence D.** *Detection of an unusually stable fibrinolytic inhibitor produced by bovine endothelial cells.*
Cell. Biol. 1983;80:2956-2960.
-
- Luster AD.** *Chemokines—chemotactic cytokines that mediate inflammation.*
N Engl J Med. 1998;338:436-445.
-
- Mach F, Schoenbeck U, Bonnefoy JY, Pober JS, Libby P.** *Activation of monocyte/macrophage functions related to acute atheroma complication by ligation of CD40. Induction of collagenase, stromelysin, and tissue factor.*
Circulation. 1997;96:396-399.
-
- Marx N, Mackman N, Schonbeck U, et al.** *PPARalpha activators inhibit tissue factor expression and activity in human monocytes.*
Circulation. 2001;103:213-219.
-
- Marx N, Sukhova GK, Collins T, Libby P, Plutzky J.** *PPARalpha activators inhibit cytokine-induced vascular cell adhesion molecule-1 expression in human endothelial cells.*
Circulation. 1999;99:3125-3131.
-
- Marx N, Sukhova GK, Murphy C, Libby P, Plutzky J.** *Macrophages in human atheroma contain PPARgamma: differentiation-dependent peroxisomal proliferator-activated receptor gamma (PPARgamma) expression and reduction of MMP-9 activity through PPARgamma activation in mononuclear phagocytes in vitro.*
Am J Pathol. 1998;153:17-23.
-
- Medzhitov R, Janeway CA Jr.** *Innate immune induction of the adaptive immune response.*
Cold Spring Harb Symp Quant Biol. 1999;64:439-435.
-
- Mukaida N, Harada A, Matsushima K.** *Interleukin-8 (IL-8) and monocyte chemotactic and activating factor (MCAF/MCP-1), chemokines essentially involved in inflammatory and immune reactions.*
Cytokine Growth Factor Rev. 1998;9:9-23.
-
- Nathan C, Shiloh MU.** *Reactive oxygen and nitrogen intermediates in the relationship between mammalian hosts and microbial pathogens.*
Proc Natl Acad Sci USA. 2000;97:8841-8848.
-
- Nemerson Y, Giesen PL.** *Some thoughts about localization and expression of tissue factor.*
Blood Coagulation Fibrinol. 1998;9(suppl 1):S45-S47.
-
- Osborn L, Hession C, Tizard R, et al.** *Direct expression cloning of vascular cell adhesion molecule 1, a cytokine-induced endothelial protein that binds to lymphocytes.*
Cell. 1989;59:1203-1211.
-

Bibliography of One Hundred Key Papers

Rajavashisth TB, Andalibi A, Territo MC, et al.	<i>Induction of endothelial cell expression of granulocyte and macrophage colony-stimulating factors by modified low-density lipoproteins.</i> Nature. 1990;344:254-257.
Raport CJ, Gosling J, Schweickart VL, Gray PW, Charo IF.	<i>Molecular cloning and functional characterization of a novel human CC chemokine receptor (CCR5) for RANTES, MIP-1beta, and MIP-1alpha.</i> J Biol Chem. 1996;271:17161-17166.
Rathmell JC, Townsend SE, Xu JC, Flavell RA, Goodnow CC.	<i>Expansion or elimination of B cells in vivo: dual roles for CD 40- and Fas (CD95)-ligands modulated by the B cell antigen receptor.</i> Cell. 1996;87:319-329.
Rekhter M, Zhang MD, Narayanan AS, Phan S, Schork MA, Gordon D.	<i>Type I collagen gene expression in human atherosclerosis. Localization to specific plaque regions.</i> Am J Pathol. 1993;143:1634-1648.
Ricote M, Huang J, Fajas L, et al.	<i>Expression of the peroxisome proliferator-activated receptor gamma (PPARgamma) in human atherosclerosis and regulation in macrophages by colony stimulating factors and oxidized low density lipoprotein.</i> Proc Natl Acad Sci USA. 1998;95:7614-7619.
Ridker PM, Cushman M, Stampfer MJ, Tracy RP, Hennekens CH.	<i>Inflammation, aspirin, and the risk of cardiovascular disease in apparently healthy men.</i> N Engl J Med. 1997;336:973-979.
Rohde LE, Ducharme A, Arroyo LH, et al.	<i>Matrix metalloproteinase inhibition attenuates early left ventricular enlargement after experimental myocardial infarction in mice.</i> Circulation. 1999;99:3063-3070.
Sakaguchi H, Takeya M, Suzuki H, et al.	<i>Role of macrophage scavenger receptors in diet-induced atherosclerosis in mice.</i> Lab Invest. 1998;78:423-434.
Schmidt AM, Yan SD, Wautier JL, Stern D.	<i>Activation of receptor for advanced glycation end products: a mechanism for chronic vascular dysfunction in diabetic vasculopathy and atherosclerosis.</i> Circ Res. 1999;84:489-497.
Schoenbeck U, Sukhova GK, Graber P, Coulter S, Libby P.	<i>Augmented expression of cyclooxygenase-2 in human atherosclerotic lesions.</i> Am J Pathol. 1999;155:1281-1291.
Shimizu K, Sugiyama S, Aikawa M, et al.	<i>Host bone-marrow cells are a source of donor intimal smooth-muscle-like cells in murine aortic transplant arteriopathy.</i> Nat Med. 2001;7:738-741.
Staels B, Koenig W, Habib A, et al.	<i>Activation of human aortic smooth-muscle cells is inhibited by PPARalpha but not by PPARgamma activators.</i> Nature. 1998;393:790-793.
Strasser A, O'Connor L, Dixit VM.	<i>Apoptosis signaling.</i> Annu Rev Biochem. 2000;69:217-245.
Sukhova GK, Shi GP, Simon DI, Chapman HA, Libby P.	<i>Expression of the elastolytic cathepsins S and K in human atheroma and regulation of their production in smooth muscle cells.</i> J Clin Invest. 1998;102:576-583.



-
- Suzuki H, Kurihara Y, Takeya M, et al.** *A role for macrophage scavenger receptors in atherosclerosis and susceptibility to infection.*
Nature. 1997;386:292-296.
-
- Thornberry NA, Bull HG, Calaycay JR, et al.** *A novel heterodimeric cysteine protease is required for interleukin-1 beta processing in monocytes.*
Nature. 1992;356:768-774.
-
- Ulevitch RJ.** *New therapeutic targets revealed through investigations of innate immunity.*
Crit Care Med. 2001;29:S8-S12.
-
- van der Wal AC, Becker AE, van der Loos CM, Das PK.** *Site of intimal rupture or erosion of thrombosed coronary atherosclerotic plaques is characterized by an inflammatory process irrespective of the dominant plaque morphology.*
Circulation. 1994;89:36-44.
-
- Van Lenten B, Hama SY, de Beer FC, et al.** *Anti-inflammatory HDL becomes pro-inflammatory during the acute phase response. Loss of protective effect of HDL against LDL oxidation in aortic wall cell cocultures.*
J Clin Invest. 1995;96:2758-2767.
-
- Virchow R.** **Cellular Pathology.** London, UK: John Churchill; 1858:342-366.
-
- Walport MJ.** *Complement.*
N Engl J Med. 2001;344:1058-66(pt 1);1140-1144(pt 2).
-
- Wang J, Springer TA.** *Structural specializations of immunoglobulin superfamily members for adhesion to integrins and viruses.*
Immunol Rev. 1998;163:197-215.
-
- Warner SJ, Auger KR, Libby P.** *Interleukin-1 induces interleukin-1. II. Recombinant human interleukin-1 production by adult human vascular endothelial cells.*
J Immunol. 1987;139:1911-1917.
-
- Wilcox JN, Smith KM, Schwartz SM, Gordon D.** *Localization of tissue factor in the normal vessel wall and in the atherosclerotic plaque.*
Proc Natl Acad Sci USA. 1989;86:2839-2843.
-
- Witztum JL, Berliner JA.** *Oxidized phospholipids and isoprostanes in atherosclerosis.*
Curr Opin Lipidol. 1998;9:441-448.
-
- Yamada Y, Doi T, Hamakubo T, Kodama T.** *Scavenger receptor family proteins: roles for atherosclerosis, host defence and disorders of the central nervous systems.*
Cell Mol Life Sci. 1998;54:628-640.
-