

# CURRICULUM VITAE

NAME: Philip J. Kadowitz, Ph.D.

ADDRESS: Department of Pharmacology  
Tulane University School of Medicine  
New Orleans, LA 70112

## EDUCATION

Rutgers University, Newark, New Jersey	1959-1963 (B.S., pharmacy)
Marquette University, Milwaukee, Wisconsin	1963-1968 (Ph.D., pharmacology)

## APPOINTMENTS:

Postdoctoral Fellow w/rank of Lecturer, Department of Pharmacology and Therapeutics, University of Manitoba	1968-69
Postdoctoral Fellow, Department of Pharmacology, University of Iowa	1969-71
Research Associate, Department of Internal Medicine, University of Iowa	1971
Assistant Professor, Department of Pharmacology, Tulane Medical School, New Orleans, LA	1971-73
Associate Professor, Department of Pharmacology, Tulane Medical School, New Orleans, LA	1973-79
Adjunct Research Assistant Professor of Surgery, Tulane Medical School, New Orleans, La	1976-84
Professor, Department of Pharmacology, Tulane Medical School, New Orleans, LA	1979-present
Adjunct Professor of Surgery, Tulane Medical School, New Orleans, LA	1/84-present
Adjunct Professor of Anesthesiology, Tulane Medical School, New Orleans, LA	1/84-present
Adjunct Professor of Physiology, Tulane Medical School, New Orleans, LA	1/84-present

## MEMBERSHIP IN SOCIETIES:

American Society for Pharmacology and Experimental Therapeutics  
Louisiana Heart Association  
American Heart Association  
Southern Society for Clinical Investigation  
International Society for Heart Research

## HONORS:

ICI (Current Contents) highly cited author. Top 0.5% of all publishing researchers in the world.

Curriculum Vitae  
Philip J. Kadowitz, Ph.D.  
Page 2

**AWARDS:**

National Institutes of Health Postdoctoral Fellowship	1963-68
Marquette University Tuition Fellowship	1966-68
Marquette University Fellowship	1967-68
National Institutes of Health Postdoctoral Fellowship	1967-68
Established Investigatorship, American Heart Association	1973-78

**LOCAL COMMITTEES:**

Chairman Research Committee, American Heart Association-Louisiana, Inc., 1979-90  
Member Board of Directors, American Heart Association-Louisiana, Inc., 1979-present  
Chairman Research Peer Review Committee, American Heart Association-Louisiana, Inc.  
Member Executive Committee, American Heart Association-Louisiana, Inc., 1985-90  
Research Committee, American Heart Association-Louisiana, Inc., 1990-present  
Research Peer Review Committee, American Heart Association-Louisiana, Inc., 1990  
present  
General Medical Faculty, Tulane, Nominating Committee and Faculty Advisory Committee  
Tulane Senate and 2 Senate Committees  
Grievance Committee  
Urology Review  
Chancellor Search Committee  
Curriculum Reform Steering (CRS) Committee  
Physiology Department Tenure Committee

**NATIONAL COMMITTEES:**

Executive Committee, Cardiopulmonary Council, American Heart Association  
Vice-Chairman Program Committee, American Heart Association, 7/86-present  
Chairman Program Committee, American Heart Association  
Member Cardiovascular D Study Section, American Heart Association, 1987 (Ad Hoc)  
Vice-Chairman, Cardiopulmonary Council, American Heart Association, 1987-89  
Chairman, Cardiopulmonary Council, American Heart Association, 1989-91  
American Heart Association Study Section D, 1994-1997

*Publications:*

1. Kadowitz PJ, Yard AC. Circulatory effects of hydrocortisone and protection against endotoxin shock in cats. Eur J Pharmacol 9:311-318, 1970
2. Kadowitz PJ, Hollands M, Dresel PE. Graded responses in isolated kitten atria due to blockade of conduction by acetyltrimethylammonium bromide (CTAB). J Pharmacol Exp Ther 174:509-516, 1970
3. Kadowitz PJ, Yard AC. Influence of hydrocortisone on cardiovascular responses to epinephrine. Eur J Pharmacol 113:281-286, 1971

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 3

4. Kadowitz PJ, Sweet CS, Brody MJ. Potentiation of adrenergic venomotor responses by angiotensin, prostaglandin F<sub>2α</sub>, and cocaine. *J Pharmacol Exp Ther* 176:167-173, 1971
5. Kadowitz PJ, Sweet CS, Brody MJ. Differential effects of prostaglandins E<sub>1</sub>, E<sub>2</sub>, F<sub>1α</sub>, and F<sub>2α</sub> on adrenergic vasoconstriction in the dog hindpaw. *J Pharmacol Exp Ther* 177:641-649, 1971
6. Sweet CS, Kadowitz PJ, Brody MJ. Another humoral substance that enhances adrenergic responsiveness during acute renal ischaemia. *Nature (Lond)* 231:263-265, 1971
7. Kadowitz PJ, Sweet CS, Brody MJ. Blockade of adrenergic vasoconstrictor responses in the dog by prostaglandins E<sub>1</sub> and A<sub>1</sub>. *J Pharmacol Exp Ther* 179:563-572, 1971
8. Sweet CS, Kadowitz PJ, Brody MJ. Arterial hypertension elicited by prolonged intravertebral infusion of angiotensin II in the conscious dog. *Am J Physiol* 221:1640-1644, 1971
9. Sweet CS, Kadowitz PJ, Brody MJ. A hypertensive response to intravertebral infusion of prostaglandin F<sub>2α</sub> in the conscious dog. *Eur J Pharmacol* 16:229-232, 1971
10. Kadowitz PJ, Sweet CS, Brody MJ. Enhancement of sympathetic neurotransmission by prostaglandin F<sub>2α</sub> in the cutaneous vascular bed of the dog. *Eur J Pharmacol* 18:189-194, 1972
11. Greenberg S, Kadowitz PJ, Schel HP, Long JP. Effects of 4,4'-biphenylene bis-(2-oxoethylene)-bis-(2,2 diethyl)dimethylammonium dibromide (DMAE) on catecholamines released by angiotensin. *Eur J Pharmacol* 17:59-65, 1972
12. Greenberg S, Diecke FPJ, Kadowitz PJ, Long LP. Effect of quaternary ammonium compounds on radiocalcium movements in nerve. *Am J Physiol* 222:1191-1198, 1972
13. Sweet CS, Kadowitz PJ, Forker EL, Brody MJ. Depression of adrenergic transmission by a factor in renal venous blood: new evidence for an antihypertensive function of the kidney. *Arch int Pharmacodyn Ther* 198:229-237, 1972
14. Kadowitz PJ, Sweet CS, Brody MJ. Influence of prostaglandins on adrenergic transmission to vascular smooth muscle. *Circ Res* 31:36-50, 1972
15. Yard AC, Kadowitz PJ. Studies on the mechanism of hydrocortisone potentiation of vasoconstrictor responses to epinephrine in the anesthetized animal. *Eur J Pharmacol* 20:1-9, 1972
16. Kadowitz PJ, Sweet CS, Brody MJ. Influence of angiotensin I, angiotensin II and cocaine on adrenergic vasoconstrictor responses in the dog hindpaw. *J Pharmacol Exp Ther* 183:275-283, 1972
17. Kadowitz PJ. Effect of prostaglandins E<sub>1</sub>, E<sub>2</sub>, and A<sub>2</sub> on vascular resistance and responses to noradrenaline, nerve stimulation and angiotensin in the dog hindlimb. *Br J Pharmacol* 46: 395-400, 1972
18. Kadowitz PJ, Hyman AL. Effect of sympathetic nerve stimulation on pulmonary vascular resistance in the dog. *Circ Res* 32:221-227, 1973

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 4

*Publications (cont'd):*

19. Kadowitz PJ, Joiner PD, Hyman AL. Differential effects of phentolamine and bretylium on pulmonary vascular responses to norepinephrine and nerve stimulation. Proc Soc Exp Med 144:172-176, 1973
20. Hyman AL, Pennington DG, Kadowitz PJ. Effect of acute pulmonary edema on pulmonary arterial pressure in intact dog. Am J Physiol 244:35-39, 1973
21. George WJ, Wilkerson WD, Kadowitz PJ. Influence of acetylcholine on contractile force and cyclic nucleotide levels in the isolated perfused rat heart. J Pharmacol Exp Ther 184:228-235, 1973
22. Greenberg S, Kadowitz PJ, Deicke FP, Long JP. Effect of prostaglandin F<sub>2α</sub> (PGF<sub>2α</sub>) on arterial and venous contractility and <sup>45</sup>Ca uptake. Arch int Pharmacodyn Ther 205:381-398, 1973
23. Gomez HJ, Kadowitz PJ, Yard AC. Effect of propranolol and controlled cardiac output on acute tolerance to noradrenaline. Eur J Pharmacol 24:131-139, 1973
24. Greenberg S, Kadowitz PJ, Schedl HP, Long JP. Effect of age and testosterone on calcium content and reactivity of guinea pig vas deferens. J Pharmacol Exp Ther 185:505-513, 1973
25. Greenberg S, Kadowitz PJ, Diecke FPJ, Long JP. Effect of PGF<sub>2α</sub> on responses of vascular smooth muscle to serotonin, angiotensin, and epinephrine. Arch int Pharmacodyn Ther 206: 5-18, 1973
26. Kadowitz PJ, Joiner PD, Hyman AL. Effect of prostaglandins E<sub>1</sub> and F<sub>2α</sub> on the swine pulmonary circulation. Proc Soc Exp Biol Med 145:53-58, 1973
27. Brody MJ, Kadowitz PJ. Prostaglandins as modulators of the autonomic nervous system. Fed Proc 33:48-60, 1974
28. Kadowitz PJ, Joiner PD, Hyman AL. Effect of sympathetic nerve stimulation on pulmonary vascular resistance in the intact spontaneously breathing dog. Proc Soc Exp Biol Med 147: 68-71, 1974
29. Greenberg S, George WJ, Kadowitz PJ, Wilson WR. Androgen-induced enhancement of vascular reactivity. Can J Physiol Pharmacol 52:14-22, 1974
30. Kadowitz PJ, Joiner PD, Hyman AL. Influence of prostaglandins E<sub>1</sub> and F<sub>2α</sub> on pulmonary vascular resistance in sheep. Proc Soc Exp Biol Med 145:1258-1261, 1974
31. Greenberg S, Kadowitz PJ, Diecke FPJ, Long JP. Effect of prostaglandin F<sub>2α</sub> (PGF<sub>2α</sub>) on venous contractility and <sup>45</sup>Ca uptake. Proc Soc Exp Biol Med 145:80-84, 1974
32. Kadowitz PJ, Joiner PD, Greenberg S, Hyman AL. Effects of prostaglandins B<sub>2</sub> and B<sub>1</sub> on the pulmonary circulation in the intact dog. J Pharmacol Exp Ther 192:157-165, 1975

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 5

*Publications (cont'd):*

33. Greenberg S, Diecke FP, Kadowitz PJ, Long JP. Effects of prostaglandin B<sub>2</sub> on vascular tone and reactivity. *Life Sci* 16:363-374, 1975
34. Hyman AL, Kadowitz PJ. Effects of alveolar and perfusion hypoxia and hypercapnia on pulmonary vascular resistance in the lamb. *Am J Physiol* 228:397-403, 1975
35. Kadowitz PJ, Joiner PD, Hyman AL, George WJ. Influence of prostaglandins E<sub>1</sub> and F<sub>2α</sub> on pulmonary vascular resistance, isolated lobar vessels and cyclic nucleotide levels. *J Pharmacol Exp Ther* 192:677-687, 1975
36. Kadowitz PJ, Joiner PD, Hyman AL. Effect of prostaglandin E<sub>2</sub> on pulmonary vascular resistance in intact dog, swine and lamb. *Eur J Pharmacol* 31:72-80, 1975
37. Kadowitz PJ, Hyman AL. Differential effects of prostaglandins A<sub>1</sub> and A<sub>2</sub> on pulmonary vascular resistance in the dog. *Proc Soc Exp Biol Med* 149:282-286, 1975
38. Kadowitz PJ, Joiner PD, Hyman AL. Physiological and pharmacological roles of prostaglandins. *Ann Rev Pharmacol* 15:285-306, 1975
39. Kadowitz PJ, Joiner PD, Hyman AL. Comparison of the effects of prostaglandins F<sub>1α</sub>, F<sub>2α</sub>, F<sub>1β</sub>, and F<sub>2β</sub> on the canine pulmonary vascular bed. *Proc Soc Exp Biol Med* 149:356-361, 1975
40. Kadowitz PJ, Joiner PD, Matthews CS, Hyman AL. Effects of the 15-methyl analogs of prostaglandins E<sub>2</sub> and F<sub>2α</sub> on the pulmonary circulation in the intact dog. *J Clin Invest* 55: 937-944, 1975
41. Goldberg MR, Joiner PD, Greenberg S, Hyman AL, Kadowitz PJ. Effects of indomethacin on venoconstrictor responses to bradykinin and norepinephrine. *Prostaglandins* 9:385-390, 1975
42. Goldberg MR, Joiner PD, Hyman AL, Kadowitz PJ. Human and canine lateral saphenous veins: a morphologic and pharmacologic study. *Blood Vessels* 12:89-97, 1975
43. Goldberg MR, Joiner PD, Hyman AL, Kadowitz PJ. Unusual venoconstrictor effects of angiotensin II. *Proc Soc Exp Biol Med* 149:707-713, 1975
44. Joiner PD, Kadowitz PJ, Hughes JP, Hyman AL. Norepinephrine and acetylcholine responses of intrapulmonary vessels from dog, swine, sheep and man. *Am J Physiol* 228: 1821-1827, 1975
45. Kadowitz PJ, Joiner PD, Hyman AL. Influence of sympathetic stimulation and vasoactive substances on the canine pulmonary veins. *J Clin Invest* 56:354-365, 1975
46. Kadowitz PJ, Chapnick BM, Joiner PD, Hyman AL. Influence of inhibitors of prostaglandin synthesis on the canine pulmonary vascular bed. *Am J Physiol* 229:941-946, 1975

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 6

*Publications (cont'd):*

47. Hyman AL, Knight DS, Joiner PD, Kadowitz PJ. Bronchopulmonary arterial shunting without anatomic anastomosis in the dog. *Circ Res* 37:285-298, 1975
48. Joiner PD, Kadowitz PJ, Hughes JP, Hyman AL. Actions of prostaglandins E<sub>1</sub> and F<sub>2α</sub> on isolated intrapulmonary vascular smooth muscle. *Proc Soc Exp Biol Med* 150:414-421, 1975
49. Joiner PD, Kadowitz PJ, Davis LB, Hyman AL. Contractile responses of canine isolated pulmonary lobar arteries and veins to norepinephrine, serotonin and tyramine. *Can J Physiol Pharmacol* 53:830-838, 1975
50. Wilson WR, Greenberg S, Kadowitz PJ, Diecke FP, Long JP. Interaction of prostaglandin A<sub>2</sub> and prostaglandin B<sub>2</sub> on vascular smooth muscle tone, vascular reactivity and electrolyte transport. *J Pharmacol Exp Ther* 195:567-576, 1975
51. George WJ, Ignarro LJ, Paddock RJ, White L, Kadowitz PJ. Oppositional effects of acetylcholine and isoproterenol on isometric tension and cyclic nucleotide concentrations in rabbit atria. *J Cyclic Nucleotide Res* 1:339-347, 1975
52. Hughes JP, Kadowitz PJ, Hyman AL, Ray JE, Joiner PD. Pharmacology of human isolated colonic circular and longitudinal smooth muscle from cancer and non-cancer patients. *Dis Colon Rectum* 19:120-125, 1976
53. Chapnick BM, Paustian PW, Klainer E, Joiner PD, Hyman AL, Kadowitz PJ. Influence of prostaglandins E, A and F on vasoconstrictor responses to norepinephrine, renal nerve stimulation and angiotensin in the feline kidney. *J Pharmacol Exp Ther* 196:44-52, 1976
54. Greenberg S, Kadowitz PJ, Long JP, Wilson WR. Studies on the nature of the prostaglandin receptor in canine and rabbit vascular smooth muscle. *Circ Res* 39:66-76, 1976
55. Kadowitz PJ, Knight DS, Hibbs RG, Ellison JP, Joiner PD, Brody MJ, Hyman AL. Influence of 5- and 6-hydroxydopamine on adrenergic transmission and nerve terminal morphology in the canine pulmonary vascular bed. *Circ Res* 39:191-199, 1976
56. Goldberg MR, Chapnick BM, Joiner PD, Hyman AL, Kadowitz PJ. Influence of inhibitors of prostaglandin synthesis on venoconstrictor responses to bradykinin. *J Pharmacol Exp Ther* 198:357-365, 1976
57. Kadowitz PJ, Chapnick BM, Kastin AJ. Comparison of α-MSH and several vasoactive substances on vascular resistance in the feline mesenteric vascular bed. *Pharmacol Biochem Behav* 5:219-221, 1976
58. Feigen LP, Klainer E, Chapnick BM, Kadowitz PJ. The effect of indomethacin on renal function in pentobarbital anesthetized dogs. *J Pharmacol Exp Ther* 198:457-463, 1976
59. Kadowitz PJ, Hyman AL. Influence of prostaglandin endoperoxide analogue on the canine pulmonary vascular bed. *Circ Res* 40:282-287, 1977

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 7

*Publications (cont'd):*

60. Chapnick BM, Paustian PW, Feigen LP, Joiner PD, Hyman AL, Kadowitz PJ. Influence of inhibitors of prostaglandin synthesis on renal vascular resistance and on renal vascular responses to vasopressor or vasodilator agents in the cat. *Circ Res* 40:348-354, 1977
61. Fink GD, Chapnick BM, Goldberg MR, Paustian PW, Kadowitz PJ. Influence of prostaglandin E<sub>2</sub>, indomethacin and reserpine on renal vascular responses to nerve stimulation, pressor and depressor hormones. *Circ Res* 41:172-178, 1977
62. Kadowitz PJ, Spannhake EW, Knight DS, Hyman AL. Vasoactive hormones in the pulmonary vascular bed. *Chest* 71(Suppl):257-261, 1977
63. Kadowitz PJ, Gruetter CA, McNamara DB, Gorman RR, Spannhake EW, Hyman AL. Comparative effects of the endoperoxide PGH<sub>2</sub> and an analog on the pulmonary vascular bed. *J Appl Physiol* 42:953-958, 1977
64. Goldberg MR, Hebert VS, Kadowitz PJ. Effects of prostaglandins and prostaglandin endoperoxide analogs on canine saphenous vein. *Am J Physiol* 233:H361-H368, 1977
65. Feigen LP, Chapnick BM, Flemming JE, Flemming JM, Kadowitz PJ. Renal vascular effects of endoperoxide analogs, prostaglandins and arachidonic acid. *Am J Physiol* 233:H573-H579, 1977
66. Hyman AL, Chapnick BM, Kadowitz PJ, Lands WEM, Crawford CG, Fried J, Barton J. Unusual pulmonary vasodilator activity of 13,14-dehydroprostacyclin methyl ester: comparison with endoperoxides and other prostanoids. *Proc Natl Acad Sci USA* 74:5711-5715, 1977
67. Paustian PW, Chapnick BM, Feigen LP, Hyman AL, Kadowitz PJ. Effects of 13,14-dehydroprostacyclin methyl ester on the feline intestinal vascular bed. *Prostaglandins* 14: 1141-1152, 1977
68. Knight DS, Hyman AL, Ellison JP, Kadowitz PJ. Catecholamine mechanisms in the canine and feline lung. *Chest* 71:262-263, 1977
69. Gruetter CA, McNamara DB, Hyman AL, Kadowitz PJ. Contractile responses of intrapulmonary vessels from three species to arachidonic acid and an epoxymethano analog of PGH<sub>2</sub>. *Can J Physiol Pharmacol* 56:206-215, 1978
70. Hyman AL, Kadowitz PJ, Lands WEM, Crawford CG, Fried J, Barton J. Coronary vasodilator activity of 13,14-dehydroprostacyclin methyl ester: comparison with PGI<sub>2</sub> and other prostanoids. *Proc Natl Acad Sci USA* 75:3522-3526, 1978
71. Lemen RJ, Gates AJ, Mathe AA, Waring WW, Hyman AL, Kadowitz PJ. Relationships among digital clubbing disease severity and serum prostaglandin F<sub>2α</sub> and E concentrations in cystic fibrosis patients. *Am Rev Respir Dis* 117:639-646, 1978

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 8

*Publications (cont'd):*

72. Goldberg MR, Kadowitz PJ. A comparison of the effects of 5- and 6-hydroxydopamine on the isolated canine saphenous vein. *Circ Res* 43:357-364, 1978
73. Spannhake EW, Mercier RR, Hyman AL, Kadowitz PJ. 15(S)-15 methyl PGF<sub>2α</sub> elicits marked peripheral airway constriction in the intact dog. *J Pharmacol Exp Ther* 207:83-91, 1978
74. Hyman AL, Mathe AA, Leslie CA, Matthews CC, Bennett JT, Spannhake EW, Kadowitz PJ. Modification of pulmonary vascular responses to arachidonic acid by alteration in physiologic state. *J Pharmacol Exp Ther* 207:388-401, 1978
75. Feigen LP, Chapnick BM, Flemming JE, Kadowitz PJ. Prostaglandins: renal vascular responses to bradykinin, histamine and nitroglycerin. *Am J Physiol* 234:H496-H502, 1978
76. Hyman AL, Spannhake EW, Kadowitz PJ. Prostaglandins and the lung. A state-of-the-art review. *Am Rev Respir Dis* 117:111-136, 1978
77. Spannhake EW, Lemen RJ, Wegmann MJ, Hyman AL, Kadowitz PJ. Effects of arachidonic acid and prostaglandins on lung function in the intact dog. *J Appl Physiol* 44:397-405, 1978
78. Spannhake EW, Lemen RJ, Wegmann MJ, Hyman AL, Kadowitz PJ. Analysis of airway effects of a PGH<sub>2</sub> analog in the anesthetized dog. *J Appl Physiol* 44:406-415, 1978
79. Feigen LP, Chapnick BM, Gorman RR, Hyman AL, Kadowitz PJ. The effect of PGH<sub>2</sub> on blood flow in the canine renal and superior mesenteric vascular beds. *Prostaglandins* 16: 803-813, 1978
80. Chapnick BM, Feigen LP, Hyman AL, Kadowitz PJ. Differential effects of prostaglandins in the mesenteric vascular bed. *Am J Physiol* 235:H326-H332, 1978
81. Kadowitz PJ, Chapnick BM, Feigen LP, Hyman AL, Nelson PK, Spannhake EW. Pulmonary and systemic vasodilator effects of the newly discovered prostaglandin PGI<sub>2</sub>. *J Appl Physiol* 45:408-413, 1978
82. Kadowitz PJ, Spannhake EW, Greenberg S, Feigen LP, Hyman AL. Comparative effects of arachidonic acid, bisenoic prostaglandins and an endoperoxide analog on the canine pulmonary vascular bed. *Can J Physiol Pharmacol* 55:369-1377, 1978
83. Gruetter CA, McNamara DB, Hyman AL, Kadowitz PJ. Contractile effects of a PGH<sub>2</sub> analog and PGD<sub>2</sub> on intrapulmonary vessels. *Am J Physiol* 234:H139-H145, 1978
84. Hyman AL, Spannhake EW, Chapnick BM, McNamara DB, Mathe AA, Kadowitz PJ. Effect of dihomo- $\delta$ -linolenic acid on the canine pulmonary vascular bed. *Am J Physiol* 234:H133-H138, 1979
85. Hyman AL, Kadowitz PJ. Pulmonary vasodilator activity of prostacyclin (PGI<sub>2</sub>) in the cat. *Circ Res* 45:404-409, 1979

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 9

*Publications (cont'd):*

86. McNamara DB, Roulet MJ, Hyman AL, Kadowitz PJ. Characterization of the energy-dependent calcium binding of a mitochondrial fraction isolated from bovine intrapulmonary vein. *Can J Physiol Pharmacol* 57:1107-1113, 1979
87. Gruetter CA, Barry BK, McNamara DB, Gruetter DY, Kadowitz PJ, Ignarro LJ. Relaxation of bovine coronary artery and activation of coronary arterial guanylate cyclase by nitric oxide, nitroprusside and a carcinogenic nitrosoamine. *J Cyclic Nucleotide Res* 5:211-224, 1979
88. Lippton HL, Paustian PW, Mellion BT, Nelson PK, Feigen LP, Chapnick BM, Hyman AL, Kadowitz PJ. Cardiovascular actions of prostacyclin ( $PGI_2$ ) in the cat. *Arch int Pharmacodyn Ther* 241:121-130, 1979
89. Lippton HL, Chapnick BM, Hyman AL, Kadowitz PJ. Inhibition of vasoconstrictor responses by prostacyclin ( $PGI_2$ ) in the feline mesenteric vascular bed. *Arch int Pharmacodyn Ther* 241: 214-223, 1980
90. Spannhake EW, Hyman AL, Kadowitz PJ. Dependence of the airway and pulmonary vascular effects of arachidonic acid upon route and rate of administration. *J Pharmacol Exp Ther* 212:584-590, 1980
91. Kadowitz PJ, Hyman AL. Comparative effects of thromboxane  $B_2$  on the canine and feline pulmonary vascular bed. *J Pharmacol Exp Ther* 213:300-305, 1980
92. Hyman AL, Spannhake EW, Kadowitz PJ. Divergent responses to arachidonic acid in the feline pulmonary vascular bed. *Am J Physiol* 239:H40-H46, 1980
93. Hyman AL, Kadowitz PJ. Vasodilator actions of prostaglandin 6-keto- $E_1$  in the pulmonary vascular bed. *J Pharmacol Exp Ther* 213:468-472, 1980
94. McNamara DB, Roulet MJ, Gruetter CA, Hyman AL, Kadowitz PJ. Correlation of prostaglandin-induced mitochondrial calcium release with contraction in bovine intrapulmonary vein. *Prostaglandins* 20:311-320, 1980
95. Spannhake EW, Levin JL, Mellion BT, Gruetter CA, Hyman AL, Kadowitz PJ. Reversal of 5HT- induced bronchoconstriction by  $PGI_2$ : distribution of central over peripheral actions. *J Appl Physiol* 49:521-527, 1980
96. Feigen LP, Chapnick BM, Hyman AL, King L, Marascalco B, Kadowitz PJ. Peripheral vasodilator effects of prostaglandins: comparison of 6-keto-prostaglandin  $E_1$  with prostacyclin and escape from prostaglandin  $E_2$  in the mesenteric vascular bed. *J Pharmacol Exp Ther* 214:528-534, 1980
97. McNamara DB, Kadowitz PJ, Hyman AL, Ignarro LJ. Adenosine 3',5'-monophosphate formation by preparations of rat liver soluble guanylate cyclase activated with nitric oxide, nitrosylferroheme, S-nitrosothiols and other nitroso compounds. *Can J Physiol Pharmacol* 58:1446-1456, 1980

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 10

*Publications (cont'd):*

98. Napoli SA, Gruetter CA, Ignarro LJ, Kadowitz PJ. Relaxation of bovine coronary arterial smooth muscle by cyclic GMP, cyclic AMP and analogs. *J Pharmacol Exp Ther* 212:469-473, 1980
99. Gruetter CA, Barry BK, McNamara DB, Kadowitz PJ, Ignarro LJ. Coronary arterial relaxation and guanylate cyclase activation by cigarette smoke, N'-nitrosonornicotine and nitric oxide. *J Pharmacol Exp Ther* 214:9-15, 1980
100. Lippton HL, Chapnick BM, Hyman AL, Kadowitz PJ. Inhibition of vasoconstrictor responses by 6-keto-PGE<sub>1</sub> in the feline mesenteric vascular bed. *Prostaglandins* 19:299-310, 1980
101. Nandiwada P, Hyman AL, Feigen LP, Kadowitz PJ. Cardiopulmonary actions of prostaglandin 6-keto-E<sub>1</sub> in the anesthetized dog. *Arch int Pharmacodyn Ther* 245:118-128, 1980
102. Kadowitz PJ, Spannhake EW, Hyman AL. Prostaglandins evoke a whole variety of responses in the lung. *Environ Health Perspect* 35:181-190, 1980
103. Gottlieb AL, Lippton HL, Parey SE, Paustian PW, Kadowitz PJ. Blockade of vasoconstrictor responses by prostacyclin (PGI<sub>2</sub>), PGE<sub>2</sub> and PGE<sub>1</sub> in the rabbit hindquarters vascular bed. *Prostaglandins Med* 4:1-11, 1980
104. Glass F, Lippton HL, Kadowitz PJ. Differential effects of local anesthetics and propranolol on arachidonic acid and adenosine 5'-diphosphate-induced aggregation in rabbit platelets. *Prostaglandins Med* 5:85-92, 1980
105. Lippton HL, Cassin S, Kadowitz PJ. Comparative effects of PGD<sub>2</sub> and PGE<sub>2</sub> on vasoconstrictor responses in the feline intestinal vascular bed. *Prostaglandins Med* 5:297-305, 1980
106. Gruetter DY, Gruetter CA, Barry B, Baricos WH, Hyman AL, Kadowitz PJ, Ignarro LJ. Activation of coronary arterial guanylate cyclase by nitric oxide, nitroprusside and nitrosoguanidine - inhibition by calcium, lanthanum and other cations, enhancement by thiols. *Biochem Pharmacol* 29:2943-2950, 1980
107. Lippton HL, Paustian PW, Sporl L, Kadowitz PJ. Comparative effects of PGD<sub>2</sub> and PGE<sub>2</sub> in the regional circulation of the cat. *Prostaglandins Med* 5:365-373, 1980
108. Lippton HL, Kadowitz PJ. Inhibition of vasoconstrictor and vasodilator responses by PGE<sub>1</sub> in the intestinal vascular bed of the cat. *Prostaglandins Med* 7:537-552, 1981
109. Lippton HL, Chapnick BM, Kadowitz PJ. Influence of prostaglandins on vasoconstrictor responses in the hindquarters vascular bed of the cat. *Prostaglandins Med* 6:183-202, 1981
110. Greenberg S, Kadowitz PJ, Hyman A, Curron FA. Adrenergic mechanisms in the canine intralobar pulmonary arteries and veins. *Am J Physiol* 240:H274-H285, 1981

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 11

*Publications (cont'd):*

111. Kadowitz PJ, Nandiwada P, Gruetter CA, Ignarro LJ, Hyman AL. Pulmonary vasodilator responses to nitroprusside and nitroglycerin in the dog. *J Clin Invest* 67:893-902, 1981
112. Hyman AL, Nandiwada P, Knight DS, Kadowitz PJ. Pulmonary vasodilator responses to catecholamines and sympathetic nerve stimulation: evidence that vascular beta-2 adrenoreceptors are innervated. *Circ Res* 48:407-415, 1981
113. Gruetter CA, Kadowitz PJ, Ignarro LJ. Methylene blue inhibits coronary arterial relaxation and guanylate cyclase activation by nitroglycerin, sodium nitrite and amyl nitrite. *Can J Physiol Pharmacol* 59:150-156, 1981
114. She HS, McNamara DB, Spannhake EW, Hyman AL, Kadowitz PJ. Metabolism of prostaglandin endoperoxide by microsomes from cat lung. *Prostaglandins* 21:531-539, 1981
115. Ignarro LJ, Kadowitz PJ, Baricos WH. Evidence that regulation of hepatic guanylate cyclase involves interactions between catalytic site -SH groups and both substrate and activator. *Arch Biochem Biophys* 208:75-86, 1981
116. Ignarro LJ, Barry BK, Gruetter DY, Ohlstein EH, Gruetter CA, Kadowitz PJ, Baricos WH. Selective alterations in responsiveness of guanylate cyclase to activation by nitroso compounds during enzyme purification. *Biochem Biophys Acta* 673:394-407, 1981
117. Ignarro LJ, Lippton H, Edwards JC, Baricos WH, Hyman AL, Kadowitz PJ, Gruetter CA. Mechanism of vascular smooth muscle relaxation by organic nitrates, nitrites, nitroprusside and nitric oxide: evidence for the involvement of S-nitrosothiols as active intermediates. *J Pharmacol Exp Ther* 218:739-749, 1981
118. Gruetter CA, Gruetter DY, Lyon JE, Kadowitz PJ, Ignarro LJ. Relationship between cyclic guanosine 3':5'-monophosphate formation and relaxation of coronary arterial smooth muscle by glyceryl trinitrate, nitroprusside, nitrite and nitric oxide: effects of methylene blue and methemoglobin. *J Pharmacol Exp Ther* 219:181-186, 1981
119. Spannhake EW, Hyman AL, Kadowitz PJ. Bronchoactive metabolites of arachidonic acid and their role in airway function. *Prostaglandins* 22:1013-1026, 1981
120. Hyman AL, Higashida RT, Spannhake EW, Kadowitz PJ. Pulmonary vasoconstrictor responses to graded decreases in precapillary blood PO<sub>2</sub> in intact-chest cat. *J Appl Physiol* 51:1009-1016, 1981
121. Glass F, Lippert H, Kadowitz PJ. Effects of methylprednisolone and hydrocortisone on aggregation of rabbit platelets induced by arachidonic acid and other aggregating substances. *Thromb Haemost* 46:676-679, 1981
122. Feigen LP, King LW, Ray J, Beckett W, Kadowitz PJ. Differential effects of ibuprofen and indomethacin in the regional circulation of the dog. *J Pharmacol Exp Ther* 219:679-684, 1981

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 12

*Publications (cont'd):*

123. Pontecorvo EG, Myers CB, Lipton HL, Kadowitz PJ. Inhibition of platelet aggregation by 6-keto-PGE<sub>1</sub>: lack of an effect on cyclic GMP levels. *Prostaglandins Med* 6:473-483, 1981
124. Spannhake EW, Levin JL, Hyman AL, Kadowitz PJ. 6-Keto-PGE<sub>1</sub> exhibits more potent bronchodilator activity in the cat than its precursor, PGI<sub>2</sub>. *Prostaglandins* 21:267-275, 1981
125. Lipton HL, Meyer RL, Parey SE, Hyman AL, Kadowitz PJ. Analysis of responses to dopamine in the mesenteric vascular bed of the cat. *Arch int Pharmacodyn Ther* 251:136-149, 1981
126. Mellion BT, Ignarro LJ, Ohlstein EH, Pontecorvo EG, Hyman AL, Kadowitz PJ. Evidence for the inhibitory role of guanosine 3',5'-monophosphate in ADP-induced human platelet aggregation in the presence of nitric oxide and related vasodilators. *Blood* 57:946-955, 1981
127. Knight DS, Ellison JP, Hibbs RG, Hyman AL, Kadowitz PJ. A light and electron microscopic study of the innervation of pulmonary arteries in the cat. *Anat Rec* 201:513-521, 1981
128. Gruetter CA, Ignarro LJ, Hyman AL, Kadowitz PJ. Contractile effects of 5-hydroxytryptamine in isolated intrapulmonary arteries and veins. *Can J Physiol Pharmacol* 59:157-162, 1981
129. Kadowitz PJ, Knight DS, Greenberg S, Hyman AL. Structure and function of the adrenergic nerves in the canine pulmonary vascular bed. *Meth Find Exp Clin Pharmacol* 3:347-359, 1981
130. Knight DS, Bazer GT, Feigen LP, Kadowitz PJ. Intramedial renal arterial nerves. *Blood Vessels* 18:187-195, 1981
131. Knight DS, Hyman AL, Kadowitz PJ. Innervation of intrapulmonary airway smooth muscle of the dog, monkey and baboon. *J Auton Nerv Syst* 3:31-43, 1981
132. Lipton HL, Chapnick BM, Hyman AL, Glass FL, Kadowitz PJ. The influence of indomethacin on vasodilator responses to bradykinin and nitroglycerin in the cat. *Peptides* 2:165-169, 1981
133. Hyman AL, Mathe AA, Lipton HL, Kadowitz PJ. Prostaglandins and the lung. *Med Clinics North Am* 65:789-808, 1981
134. Kadowitz PJ, Gruetter CA, Spannhake EW, Hyman AL. Pulmonary vascular responses to prostaglandins. *Fed Proc* 40:1991-1996, 1981
135. Kadowitz PJ, McNamara DB, She HS, Spannhake EW, Hyman AL. Arachidonic acid responses in the lung. *Bull Eur Physiopathol Respir* 17:659-673, 1981
136. Spannhake EW, Levin JL, McNamara DB, Hyman AL, Kadowitz PJ. *In vivo* synthesis of airway-active agents from arachidonic acid. *Bull Eur Physiopathol Respir* 17:523-530, 1981
137. Lipton HL, Gruetter CA, Ignarro LJ, Meyer RL, Kadowitz PJ. Vasodilator actions of several N-nitroso compounds. *Can J Physiol Pharmacol* 60:68-75, 1982

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 13

*Publications (cont'd):*

138. Levin JL, Spannhake EW, Hyman AL, Kadowitz PJ. Analysis of airway responses to dihomo- $\delta$ -linolenic acid in the cat. *J Pharmacol Exp Ther* 223:169-176, 1982
139. Ignarro LJ, Degnan JN, Baricos WH, Kadowitz PJ, Wolin MS. Activation of purified guanylate cyclase by nitric oxide requires heme. Comparison of heme-deficient, heme-reconstituted and heme-containing forms of soluble enzyme from bovine lung. *Biochem Biophys Acta* 718: 49-59, 1982
140. McNamara DB, Boineau FG, McMullen-Laird M, Lippiton HL, She HS, Lewy JE, Kadowitz PJ. Prostaglandin endoperoxide metabolism by microsomes of whole kidney from normal, congenital unilateral hydronephrotic and unilateral ureteral obstructed rats. *Prostaglandins* 24:585-605, 1982
141. Kadowitz PJ, Hyman AL. Hydralazine and the treatment of primary pulmonary hypertension. *N Engl J Med* 306:1357-1359, 1982
142. Hyman AL, Kadowitz PJ, Spannhake EW. Pulmonary vasoreactivity and the microcirculation. *Res Staff Phys* Aug, 1982
143. Spannhake EW, Colombo JL, Craig PA, McNamara DB, Hyman AL, Kadowitz PJ. Evidence for modification of pulmonary cyclooxygenase activity by endotoxin in the dog. *J Appl Physiol* 54:191-198, 1983
144. Kadowitz PJ, Hyman AL. Pulmonary vascular responses to histamine in sheep. *Am J Physiol* 244:H423-H428, 1983
145. Spannhake EW, Levin JL, Hyman AL, Kadowitz PJ. *In vivo* metabolism of dihomo- $\delta$ -linolenic acid to bronchoactive products in the canine lung. *Prostaglandins Leukot Med* 10:123-132, 1983
146. Mellion BT, Ignarro LJ, Myers CB, Ohlstein EH, Ballot BA, Hyman AL, Kadowitz PJ. Inhibition of human platelet aggregation by S-nitrosothiols. Heme-dependent activation of soluble guanylate cyclase and stimulation of cyclic GMP accumulation. *Mol Pharmacol* 23:653-664, 1983
147. Kerstein MD, Saroyan M, McMullen-Laird M, Hyman AL, Kadowitz PJ, McNamara DB. Metabolism of prostaglandins in human saphenous vein. *J Surg Res* 35:91-100, 1983
148. Nandiwada PA, Hyman AL, Kadowitz PJ. Pulmonary vasodilator responses to vagal stimulation and acetylcholine in the cat. *Circ Res* 53:86-95, 1983
149. Kadowitz PJ, Nandiwada PA, Spannhake EW, Rosenson RS, McNamara DB, Hyman AL. Pulmonary vascular responses to thromboxane A<sub>2</sub> as unmasked by OKY-1581, a novel inhibitor of thromboxane synthesis. *Chest* 83:72S-74S, 1983
150. Edwards JC, Ignarro LJ, Hyman AL, Kadowitz PJ. Relaxation of intrapulmonary artery and vein by nitrogen oxide-containing vasodilators and cyclic GMP. *J Pharmacol Exp Ther* 228: 33-42, 1983

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 14

*Publications (cont'd):*

151. Krishnamurti VSR, Kadowitz PJ. Influence of adenosine triphosphate on the isolated perfused mesenteric artery of the rabbit. *Can J Physiol Pharmacol* 61:1409-1417, 1983
152. Lipton HL, Gottlieb AL, Landry AZ, Kadowitz PJ. Influence of arachidonic acid on vasoconstrictor responses in the rabbit hindquarters vascular bed. *Prostaglandins Leukot Med* 12:125-136, 1983
153. Hyman AL, Kadowitz PJ. Vasodilator therapy for pulmonary hypertensive disorders. *Chest* 85:145-147, 1984
154. McNamara DB, Hussey JL, Kerstein MD, Rosenson RS, Hyman AL, Kadowitz PJ. Modulation of prostacyclin synthase and unmasking of PGE<sub>2</sub> isomerase in bovine coronary arterial microsomes. *Biochem Biophys Res Commun* 118:33-39, 1984
155. Lipton HL, Armstead WM, Hyman AL, Kadowitz PJ. Vasoconstrictor effects of leukotrienes C<sub>4</sub> and D<sub>4</sub> in the feline mesenteric vascular bed. *Prostaglandins* 27:233-243, 1984
156. Armstead WM, Lipton HL, Hyman AL, Kadowitz PJ. Analysis of adrenergic responses in the mesenteric vascular bed of the cat; evidence that vascular beta<sub>2</sub>-adrenoceptors are innervated. *Can J Physiol Pharmacol* 62:1470-1478, 1984
157. Kadowitz PJ, Hyman AL. Analysis of responses to leukotriene D<sub>4</sub> in the pulmonary vascular bed. *Circ Res* 55:707-717, 1984
158. Ignarro LJ, Burke TM, Wood KS, Wolin MS, Kadowitz PJ. Association between cyclic GMP accumulation and acetylcholine-elicited relaxation of bovine intrapulmonary artery. *J Pharmacol Exp Ther* 228:682-690, 1984
159. Lipton HL, Nandiwada PA, Hyman AL, Kadowitz PJ. Influence of cyclooxygenase blockade on responses to isoproterenol, bradykinin and nitroglycerin in the feline pulmonary vascular bed. *Prostaglandins* 28:253-270, 1984
160. Saroyan RM, Kerstein MD, Kadowitz PJ, Hyman AL, McNamara DB. Prostacyclin synthetase activity in diabetic human venous tissue. *Surgery* 96:179-183, 1984
161. Lipton HL, Horwitz PM, McNamara DB, Landry AZ, Kadowitz PJ. Influence of verapamil and diltiazem on aggregatory responses in cat and rabbit platelet rich plasma. *Prostaglandins Leukot Med* 16:121-130, 1984
162. Lipton HL, Horwitz PM, McNamara DB, Ignarro LJ, Landry AZ, Hyman AL, Kadowitz PJ. The effects of amrinone on human platelet aggregation: evidence that amrinone does not act through a cyclic nucleotide mechanism in platelet rich plasma. *Prostaglandins Leukot Med* 18:93-204, 1985
163. Philpot VB, Lipton HL, Kadowitz PJ. Effect of aspirin on serum thrombin time and bleeding time. *Prostaglandins Leukot Med* 19:123-130, 1985

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 15

*Publications (cont'd):*

164. Nandiwada PA, Kadowitz PJ, Said SI, Mojarad M, Hyman AL. Pulmonary vasodilator responses to vasoactive intestinal peptide in the cat. *J Appl Physiol* 58:1723-1728, 1985
165. Ignarro LJ, Harbison RG, Wood KS, Wolin MS, McNamara DB, Hyman AL, Kadowitz PJ. Differences in responsiveness of intrapulmonary artery and vein to arachidonic acid: mechanism of arterial relaxation involves cyclic guanosine 3':5'-monophosphate and cyclic adenosine 3',5'-monophosphate. *J Pharmacol Exp Ther* 233:560-569, 1985
166. Spannhake EW, Kadowitz PJ, Kleeberger SR. Influence of mediators of anaphylaxis on collateral ventilation and the lung periphery of the dog. *J Pharmacol Exp Ther* 234:491-497, 1985
167. Ignarro LJ, Kadowitz PJ. The pharmacological and physiological role of cyclic GMP in vascular smooth muscle relaxation. *Ann Rev Pharmacol Toxicol* 25:171-191, 1985
168. Hyman AL, Kadowitz PJ. Evidence for the existence of postjunctional alpha-1 and alpha-2 adrenoceptors in the feline pulmonary vascular bed. *Am J Physiol* 249:H891-H898, 1985
169. Hyman AL, Lipton HL, Kadowitz PJ. Autonomic regulation of the pulmonary circulation. *J Cardiovasc Pharmacol* 7:S80-S95, 1985
170. Kadowitz PJ, McNamara DB, Hyman AL. Pulmonary venous responses to leukotrienes. *Prog Clin Biol Res* 199:247-257, 1985
171. Hyman AL, Kadowitz PJ. Enhancement of alpha- and beta-adrenoceptor responses by elevations in vascular tone in pulmonary circulation. *Am J Physiol* 250:H1109-H1116, 1986
172. Guinee DG, McNamara DB, Ignarro LJ, Hyman AL, Kadowitz PJ. Arachidonic acid and acetylcholine induced relaxation of bovine coronary artery: effect of indomethacin and methylene blue. *Can J Cardiol* 2:70-75, 1986
173. Ignarro LJ, Harbison RG, Wood KS, Kadowitz PJ. Dissimilarities between methylene blue and cyanide on relaxation and cyclic GMP formation in endothelium-intact intrapulmonary artery caused by nitrogen oxide-containing vasodilators and acetylcholine. *J Pharmacol Exp Ther* 236:30-36, 1986
174. Ignarro LJ, Wood KS, Harbison RG, Kadowitz PJ. Atriopeptin II relaxes and elevates cyclic GMP in bovine pulmonary artery but not vein. *J Appl Physiol* 60:1128-1133, 1986
175. Graybar GB, Harrington JK, Cowen KH, Spannhake EW, Hyman AL, McNamara DB, Kadowitz PJ. Cyclooxygenase mediated airway response to leukotriene D<sub>4</sub> in the cat. *Prostaglandins* 31:167-177, 1986
176. Ignarro LJ, Harbison RG, Wood KS, Kadowitz PJ. Activation of purified soluble guanylate cyclase by endothelium-derived relaxing factor from intrapulmonary artery and vein: stimulation by acetylcholine, bradykinin and arachidonic acid. *J Pharmacol Exp Ther* 237:893-900, 1986

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 16

*Publications (cont'd):*

177. Tod ML, Cassin S, McNamara DB, Kadowitz PJ. Effects of prostaglandin H<sub>2</sub> on perinatal pulmonary circulation. *Pediatr Res* 20:565-569, 1986
178. McNamara DB, Donath GR, Kadowitz PJ, Hyman AL, Rush DS, Kerstein MD. Prostacyclin synthetase activity in human diabetic and nondiabetic vascular tissue. *J Vasc Surg* 4:63-67, 1986
179. Bellan JA, Kerstein MD, Cassin S, Kadowitz PJ, Hyman AL, Rush DS, McNamara DB. Pulmonary thromboxane synthetase activity: a developmental study. *Surg Forum* 37:319-321, 1986
180. Hyman AL, Lipton HL, Kadowitz PJ. Nature of alpha-1 and postjunctional alpha-2 adrenoceptors in the pulmonary vascular bed. *Fed Proc* 45:2336-2340, 1986
181. Kriseman T, Underwood DC, Hyman AL, Kadowitz PJ. Analysis of airway responses to A23187 in the cat. *J Pharmacol Exp Ther* 239:395-399, 1986
182. Tilden SJ, Underwood DC, Cowen KH, Wegmann MJ, Graybar GB, Hyman AL, McNamara DB, Kadowitz PJ. Effects of OKY-1581 on bronchoconstrictor responses to arachidonic acid and PGH<sub>2</sub>. *J Appl Physiol* 62:2066-2074, 1987
183. Lipton HL, Armstead WM, Hyman AL, Kadowitz PJ. Influence of calcium-entry blockade on vasoconstrictor responses in feline mesenteric vascular bed. *Circ Res* 61:570-580, 1987
184. Underwood DC, Kriseman T, McNamara DB, Hyman AL, Kadowitz PJ. Blockade of thromboxane responses in the airway of the cat by SQ 29,548. *J Appl Physiol* 62:2193-2200, 1987
185. Armstead WM, Lipton HL, Hyman AL, Kadowitz PJ. Influence of nisoldipine on vascular resistance and vasoconstrictor responses in cats. *Am J Physiol* 252:H816-H825, 1987
186. Kriseman T, Underwood D, McNamara DB, Kadowitz PJ. Inhibition of A23187-induced bronchoconstriction by dazoxiben a thromboxane synthesis inhibitor. *Am J Med Sci* 293:240-253, 1987
187. Lipton HL, Armstead WM, Hyman AL, Kadowitz PJ. Characterization of the vasoconstrictor activity of indomethacin in the mesenteric vascular bed of the cat. *Prostaglandins Leukot Med* 27:81-91, 1987
188. Rush DS, Kerstein MD, Bellan JA, Knoop SM, Mayeux PR, Hyman AL, Kadowitz PJ, McNamara DB. Prostacyclin, thromboxane A<sub>2</sub>, and prostaglandin E<sub>2</sub> formation in atherosclerotic human carotid artery. *Arteriosclerosis* 8:73-78, 1988
189. Kadowitz PJ, Armstead WM, Roland PY, Hyman AL, Lipton HL. Inhibitory effects of diltiazem on vasoconstrictor responses in the cat. *J Pharmacol Exp Ther* 244:84-90, 1988
190. Hyman AL, Kadowitz PJ. Tone-dependent responses to acetylcholine in the feline pulmonary vascular bed. *J Appl Physiol* 64:2002-2009, 1988

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 17

*Publications (cont'd):*

191. Akers DL, Kerstein MD, Rush DS, Bellan JA, Haynes DF, Kadowitz PJ, McNamara DB. Prostacyclin and thromboxane A<sub>2</sub> formation by atherosclerotic carotid artery: comparison with normal aorta, saphenous vein and platelets. *J Vasc Surg* 8:520-526, 1988
192. Mayeux PR, Agrawal KC, Tou J-S, King BT, Lipton HL, Hyman AL, Kadowitz PJ, McNamara DB. The pharmacological effects of allicin, a constituent of garlic oil. *Agents Actions* 25:182-190, 1988
193. Hyman AL, Dempsey CW, Fontana C, Richardson DE, Rieck RW, Kadowitz PJ. Pulmonary vascular responses to forebrain stimulation in the cat. *Circ Res* 63:493-501, 1988
194. Kumar P, Bryan C, Hwang D, Kadowitz PJ, Butcher B, Leech SH. Allergic rhinitis relieved by aspirin and other nonsteroidal antiinflammatory drugs. *Ann Allergy* 60:419-422, 1988
195. Hyman AL, Kadowitz PJ. Autonomic mechanisms in the pulmonary vascular bed. In: *Progress in Catecholamine Research. Part A: Basic Aspects and Peripheral Mechanisms*. pp 491-496, Alan R Liss, Inc, 1988
196. Waring PH, Hyman AL, Nandiwada PA, Kadowitz PJ. Influence of OKY-1581 on responses to arachidonic acid in the feline pulmonary vascular bed. *Prostaglandins Leukot Essent Fatty Acids* 31:117-122, 1988
197. Kadowitz PJ, McNamara DB, Hyman AL. Cardiopulmonary responses to leukotrienes. *Ann NY Acad Sci USA* 524:142-152, 1988
198. Lipton HL, Lepak K, Cohen G, Roland P, Kadowitz PJ, Hyman AL. Vasodilator activity of human alpha-calcitonin gene-related peptide in the feline mesenteric vascular bed. *Am J Hypertens* 1:124S-126S, 1988
199. Minkes RK, MacMillan LA, Bellan JA, Kerstein MD, McNamara DB, Kadowitz PJ. Analysis of regional responses to endothelin in hindquarters vascular bed of the cat. *Am J Physiol* 267:H598-H602, 1989
200. McNamara DB, Harrington JK, Bellan JA, Graybar GB, Underwood DC, Kadowitz PJ. Inhibition of pulmonary thromboxane A<sub>2</sub> synthase activity and airway responses by CGS 13080. *Mol Cell Biochem* 85:29-41, 1989
201. Mayeux PR, Kadowitz PJ, McNamara DB. Differential effects of ibuprofen, indomethacin and meclofenamate on prostaglandin endoperoxide H<sub>2</sub> metabolism. *Mol Cell Biochem* 87:41-46, 1989
202. Mayeux PR, Kadowitz PJ, McNamara DB. Evidence for a bidirectional prostaglandin endoperoxide shunt between platelets and the bovine coronary artery. *Biochem Biophys Acta* 1011:18-24, 1989
203. Minkes RK, Bellan JA, Kerstein MD, McNamara DB, Kadowitz PJ. Nisoldipine inhibits adrenergic responses in the hindquarters vascular bed of the cat. *Eur J Pharmacol* 165:259-267, 1989

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 18

*Publications (cont'd):*

204. Minkes RK, Coy DH, Murphy WA, McNamara DB, Kadowitz PJ. Effects of porcine and rat endothelin and an analog on blood pressure in the anesthetized cat. *Eur J Pharmacol* 164: 571-575, 1989
205. Underwood DC, Kadowitz PJ. Analysis of bronchoconstrictor responses to platelet-activating factor in the cat. *J Appl Physiol* 67:377-382, 1989
206. Neely CF, Kadowitz PJ, Lippiton H, Neiman M, Hyman AL. Adenosine does not mediate the pulmonary vasodilator response of adenosine 5'-triphosphate in the feline pulmonary vascular bed. *J Pharmacol Exp Ther* 250:170-176, 1989
207. Hyman AL, Kadowitz PJ. Analysis of responses to sympathetic nerve stimulation in the feline pulmonary vascular bed. *J Appl Physiol* 67:371-376, 1989
208. Kadowitz PJ, Lippiton HL, Bellan JA, Hyman AL. Nisoldipine inhibits vasoconstrictor responses in the cat pulmonary vascular bed. *J Appl Physiol* 66:2885-2890, 1989
209. Minkes RK, Kadowitz PJ. Influence of endothelin on systemic arterial pressure and regional blood flow in the cat. *Eur J Pharmacol* 163:163-166, 1989
210. Hyman AL, Kadowitz PJ, Lippiton HL. Methylene blue selectively inhibits pulmonary vasodilator responses in cats. *J Appl Physiol* 66:1513-1517, 1989
211. Minkes RK, Kadowitz PJ. Differential effects of rat endothelin on regional blood flow in the cat. *Eur J Pharmacol* 165:161-164, 1989
212. McNamara DB, Harrington JK, Bellan JA, Graybar GB, Underwood DC, Kadowitz PJ. Inhibition of pulmonary thromboxane A<sub>2</sub> synthase activity and airway responses by CGS 13080. *Mol Cell Biochem* 85:29-41, 1989
213. Hyman AL, Kadowitz PJ. Influence of tone on responses to acetylcholine in the rabbit pulmonary vascular bed. *J Appl Physiol* 67:1388-1394, 1989
214. Crumb WJ, Kadowitz PJ, Xu Y-Q, Clarkson CW. Electrocardiographic evidence for cocaine cardiotoxicity in cat. *Can J Physiol Pharmacol* 68:622-625, 1990
215. Minkes RK, Kadowitz PJ. Comparative responses to endothelin-2 and sarafotoxin 6b in the systemic vascular bed of cats. *Am J Physiol* 258:H1550-H1558, 1990
216. Minkes RK, Lippiton HL, Armstead WM, Lepak KA, Higuera TR, McNamara DB, Kadowitz PJ. Influence of SQ 29,548 on vasoconstrictor responses in the mesenteric vascular bed of the cat. *Eur J Pharmacol* 179:119-127, 1990
217. Hyman AL, Kadowitz PJ, Lippiton HL. Autonomic nervous system regulation of the pulmonary circulation. *Bull Eur Physiopathol Resp*, 1990

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 19

*Publications (cont'd):*

218. Bellan JA, Minkes RK, Kerstein MD, Shah SV, Kadowitz PJ, Cassin S, McNamara DB. Concentration-activity profile of the modulation of cyclooxygenase product formation by reduced glutathione in microsomal fractions from the goat lung. *Biochim Biophys Acta* 1044: 315-322, 1990
219. Minkes RK, Bellan JA, Saroyan RM, Kerstein MD, Coy DH, Murphy WA, Nossaman BD, McNamara DB, Kadowitz PJ. Analysis of cardiovascular and pulmonary responses to endothelin-1 and endothelin-3 in the anesthetized cat. *J Pharmacol Exp Ther* 253:1118-1125, 1990
220. Hyman AL, Lippton HL, Kadowitz PJ. Analysis of pulmonary vascular responses in cats to sympathetic nerve stimulation under elevated tone conditions. Evidence that neuronally released norepinephrine acts on alpha 1, alpha 2, and beta 2 adrenoceptors. *Circ Res* 67: 862-870, 1990
221. Minkes RK, Higuera TR, Rogers GF, Sheldon EA, Langston MA, Kadowitz PJ. Cardiovascular responses to vasoactive intestinal contractor, a novel endothelin-like peptide. *Am J Physiol* 259:H1152-H1160, 1990
222. Dyson MC, Bellan JA, Minkes RK, Beckerman RC, Wegmann MJ, Braquet P, McNamara DB, Kadowitz PJ. Influence of SK&F 95587 and BN50730 on bronchoconstrictor responses in the cat. *J Pharmacol Exp Ther* 255:1320-1327, 1990
223. Haynes DF, Kerstein MD, Roberts MP, Bell WH, Rush DS, Kadowitz PJ, McNamara DB. Increased prostacyclin and thromboxane A<sub>2</sub> formation in varicose vein. *J Surg Res* 49:228-233, 1990
224. Kapicioglu S, McNamara DB, Vaccarella MY, Kadowitz PJ, Hoda S, Ertan A. Prostaglandin E<sub>2</sub> formation by rat gastroduodenal tissue following intragastric acid perfusion. *Prostaglandins Leukot Essent Fatty Acids* 39:277-281, 1990
225. Burch E, Kadowitz J, Kotler-Cope S, McNamara DB. The effects of alcoholism and smoking on platelet eicosanoid synthesis. *Prostaglandins Leukot Essent Fatty Acids* 42:39-44, 1991
226. Hyman AL, Lippton HL, Kadowitz PJ. Methylene blue prevents hypoxic pulmonary vasoconstriction in cats. *Am J Physiol* 260:H586-H592, 1991
227. Dyson MC, Kadowitz PJ. Influence of SK&F 96148 on thromboxane-mediated responses in the airways of the cat. *Eur J Pharmacol* 197:17-25, 1991
228. Minkes RK, Nossaman BD, Kvamme P, Kadowitz PJ. Comparative responses to endothelin-2 and sarafotoxin 6b in the pulmonary vascular bed of the cat. *Can J Physiol Pharmacol* 69: 211-214, 1991
229. Minkes RK, Kvamme P, Higuera TR, Nossaman BD, Kadowitz PJ. Analysis of pulmonary and systemic vascular responses to cromakalim, an activator of K<sup>+</sup><sub>ATP</sub> channels. *Am J Physiol* 260:H957-H966, 1991

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 20

*Publications (cont'd):*

230. Kadowitz PJ, Kvamme P, Nossaman BD, Ibrahim IN, Minkes RK. Influence of vasoactive intestinal contractor on the feline pulmonary vascular bed. *Eur J Pharmacol* 194:127-130, 1991
231. Bellan JA, Minkes RK, McNamara DB, Kadowitz PJ. N<sup>ω</sup>-Nitro-L-arginine selectively inhibits vasodilator responses to acetylcholine and bradykinin in cats. *Am J Physiol* 260:H1025-H1029, 1991
232. McMahon TJ, Hood JS, Kadowitz PJ. Analysis of responses to sarafotoxin 6a and sarafotoxin 6c in the pulmonary vascular bed of the cat. *J Appl Physiol* 71:2019-2025, 1991
233. McMahon TJ, Hood JS, Nossaman BD, Ibrahim IN, Feng C-J, Kadowitz PJ. Influence of SQ 30741 on thromboxane-receptor-mediated responses in the feline pulmonary vascular bed. *J Appl Physiol* 71:2012-2018, 1991
234. McMahon TJ, Hood JS, Bellan JA, Kadowitz PJ. N<sup>ω</sup>-Nitro-L-arginine methyl ester selectively inhibits vasodilator responses to acetylcholine and bradykinin in the pulmonary vascular bed of the cat. *J Appl Physiol* 71:2026-2031, 1991
235. Hood JS, McMahon TJ, Kadowitz PJ. Influence of lemakalim on the pulmonary vascular bed of the cat. *Eur J Pharmacol* 202:101-104, 1991
236. Hood JS, McMahon TJ, Kadowitz PJ. Pulmonary vasodilator responses to RP52891 are mediated by activation of a glibenclamide-sensitive K<sup>+</sup><sub>ATP</sub> channel. *Eur J Pharmacol* 202:121-124, 1991
237. Cassin S, Kristov V, Davis T, Kadowitz PJ, Gause G. Tone-dependent responses to endothelin in the isolated perfused fetal sheep pulmonary circulation *in situ*. *J Appl Physiol* 70:1228-1234, 1991
238. Minkes RK, Kadowitz PJ. Differential effects of endothelin peptides in the systemic and pulmonary vascular beds of the cat. *Neurochem Intl* 18:547-552, 1991
239. Minkes RK, Kadowitz PJ. Hemodynamic responses to sarafotoxin peptides. *J Cardiovasc Pharmacol* 17:S293-S296, 1991
240. Kadowitz PJ, McMahon T, Hood JS, Feng C-J, Minkes RK, Dyson MC. Pulmonary vascular and airway responses to endothelin-1 are mediated by different mechanisms. *J Cardiovasc Pharmacol* 17:S374-S377, 1991
241. Minkes RK, Bellan JA, McMahon T, McNamara DB, Kadowitz PJ. Influence of SQ 29,548 on vasoconstrictor responses in the hindquarters vascular bed of the cat. *Prostaglandins Leukot Essent Fatty Acids* 44:83-88, 1991
242. Neely CF, Haile DM, Cahill BE, Kadowitz PJ. Adenosine and ATP produce vasoconstriction in the feline pulmonary vascular bed by different mechanisms. *J Pharmacol Exp Ther* 258: 753-761, 1991

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 21

*Publications (cont'd):*

243. Minkes RK, Bellan JA, Higuera TR, Kadowitz PJ. Comparison of responses to sarafotoxin 6a and 6c in pulmonary and systemic vascular beds. *Am J Physiol* 262:H852-H861, 1992
244. McMahon TJ, Hood JS, Kadowitz PJ. Pulmonary vasodilator response to vagal stimulation is blocked by N<sup>ω</sup>-nitro-L-arginine methyl ester in the cat. *Circ Res* 70:364-369, 1992
245. Dyson MC, Kadowitz PJ. Analysis of responses to endothelins and sarafotoxin 6b in the airways of the cat. *J Appl Physiol* 71:243-251, 1992
246. Boyd VL, Kvamme P, Harbison R, Kadowitz PJ, McNamara DB. Actions of SQ 29,548 on isolated contractile responses and arachidonic acid on bovine intrapulmonary arteries. *Agents Actions* 35:280-288, 1992
247. Bellan JA, Minkes RK, Hood JS, McMahon TJ, Higuera TR, Nossaman BD, McNamara DB, Kadowitz PJ. Analysis of pulmonary and systemic vascular responses to platelet-activating factor in the cat. *Am J Physiol* 263:H234-H243, 1992
248. McMahon TJ, Hood JS, Nossaman BD, Hyman AL, Kadowitz PJ. Characterization of thromboxane receptor blocking effect of SQ 29548 in the feline pulmonary vascular bed. *J Appl Physiol* 72:1194-1200, 1992
249. Hood JS, Nossaman BD, Ibrahim IN, McMahon TJ, Babycos CR, Kadowitz PJ. Daltroban blocks thromboxane responses in the pulmonary vascular bed of the cat. *J Appl Physiol* 72:2305-2310, 1992
250. McMahon TJ, Kadowitz PJ. Methylene blue inhibits neurogenic cholinergic vasodilator responses in the pulmonary vascular bed of the cat. *Am J Physiol* 263:L575-584, 1992
251. Nossaman BD, McMahon TJ, Ragheb MS, Ibrahim IN, Babycos CR, Hood JS, Kadowitz PJ. Blockade of thromboxane/endoperoxide receptor-mediated responses in the pulmonary vascular bed of the cat by sulotroban. *J Pharmacol* 213:1-7, 1992
252. Saroyan RM, Roberts MP, Light JT, Chen I-L, Vaccarella MY, Bang DJ, Kvamme P, Singh S, Scalia SV, Kerstein MD, Kadowitz PJ, McNamara DB. Differential recovery of prostacyclin and endothelium-dependent relaxing factor after vascular injury. *Am J Physiol* 31:H1449-H1457, 1992
253. Minkes RK, McMahon TJ, Hood JS, Murphy WA, Coy DH, McNamara DB, Kadowitz PJ. Differential effects of PACAP and VIP on the pulmonary and hindquarters vascular beds of the cat. *J Appl Physiol* 72:1212-1217, 1992
254. McMahon TJ, Kaye AD, Hood JS, Minkes RK, Nossaman BD, Kadowitz PJ. Inhibitory effects of DuP 753 and EXP 3471 on responses to angiotensin II in the pulmonary vascular bed of the cat. *J Appl Physiol* 73:2054-2061, 1992

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 22

*Publications (cont'd):*

255. McNamara DB, Light JT, Minkes RK, Saroyan RM, Kvamme P, Rowe N, Webb WR, Fox L, Kerstein MD, Mills NL, Kadowitz PJ. Comparative effects of endothelin (ET-1) and U46619 on human saphenous vein and gastroepiploic artery, sources of human autogenous grafts. *Mol Cell Biochem* 117:81-85, 1992
256. Kvamme P, Minkes RK, Kadowitz PJ. Influence of SK&F 95587 on responses in the mesenteric and hindquarters vascular beds of the cat. *Eicosanoids* 5:122-133, 1992
257. Minkes RK, McMahon TJ, Higuera TR, Murphy WA, Coy DH, Kadowitz PJ. Analysis of systemic and pulmonary vascular responses to PACAP and VIP: role of adrenal catecholamines. *Am J Physiol* 263:H1659-H1669, 1992
258. Tamura DY, Minkes RK, Bellan JA, McMahon TJ, McNamara DB, Kadowitz PJ. Analysis of responses to big endothelin in the hindquarters vascular bed of the cat. *Can J Cardiol* 8:954-960, 1992
259. Ascuitto RJ, Ross-Ascuitto NT, Ramage D, McDonough KH, Kadowitz PJ. Acetylcholine-induced coronary vasoconstriction and negative inotropy in the neonatal pig heart. *Pediatr Res* 32:236-242, 1992
260. Light JT, Bellan JA, Roberts MP, Force SD, Chen I-L, Kerstein MD, Kadowitz PJ, McNamara DB. Heparin treatment enhances the recovery of neoendothelial acetylcholine-induced vascular relaxation after balloon catheter injury in the rabbit aorta. *Circulation* 88:II413-II419, 1993
261. McMahon TJ, Kadowitz PJ. Analysis of responses to substance P in the pulmonary vascular bed of the cat. *Am J Physiol* 264:394-402, 1993
262. Osei S, Minkes RK, Bellan JA, Kadowitz PJ. Analysis of the inhibitory effects of DuP 753 and EXP 3471 on responses to angiotensin II in the feline hindquarters vascular bed. *J Pharmacol Exp Ther* 264:1104-1109, 1993
263. Bellan JA, McNamara DB, Kadowitz PJ. Differential effects of nitric oxide synthesis inhibitors on vascular resistance and responses to acetylcholine in cats. *Am J Physiol* 264:H45-H52, 1993
264. McMahon TJ, Ignarro LJ, Kadowitz PJ. Influence of Zaprinast on vascular tone and vasodilator responses in the cat pulmonary vascular bed. *J Appl Physiol* 74:1704-1711, 1993
265. Light JT, Bellan JA, Chen I-L, Longenecker LL, Murphy WA, Coy DH, Kadowitz PJ, McNamara DB. Angiopeptin enhances acetylcholine-induced relaxation and inhibits intimal hyperplasia after vascular injury. *Am J Physiol* 265:H1265-H1274, 1993
266. McMahon TJ, Hood JS, Nossaman BD, Kadowitz PJ. Analysis of responses to serotonin in the pulmonary vascular bed of the cat. *J Appl Physiol* 75:93-102, 1993

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 23

*Publications (cont'd):*

267. Santiago JA, Osei SY, Kadowitz PJ. Inhibitory effects of Hoe 140 on vasodilator responses to bradykinin in the mesenteric vascular bed of the cat. *Eur J Pharmacol* 236:315-318, 1993
268. Santiago JA, Kadowitz PJ. Analysis of responses to pituitary adenylate cyclase activating polypeptide-38 in the feline hindquarters vascular bed. *Eur J Pharmacol* 243:291-294, 1993
269. Cheng DY, McMahon TJ, DeWitt BJ, Carroll GC, Lee SS, Murphy WA, Bitar KG, Coy DH, Kadowitz PJ. Comparison of responses to pituitary adenylate cyclase activating peptides 38 and 27 in the pulmonary vascular bed of the cat. *Eur J Pharmacol* 243:79-82, 1993
270. Ross-Asciutto NT, Asciutto RJ, Ramage D, Kydon DW, Coy D, Kadowitz PJ. Pituitary adenylate cyclase activating polypeptide, a neuro-peptide with potent inotropic and coronary vasodilatory effects in neonatal pig hearts. *Pediatr Res* 34:323-328, 1993
271. Majid DSA, Williams A, Kadowitz PJ, Navar LG. Renal responses to intraarterial administration of nitric oxide donor in dogs. *Hypertension* 22:535-541, 1993
272. Osei SY, Ahima RS, Minkes RK, Weaver JP, Khosla MC, Kadowitz PJ. Differential responses to angiotensin (1-7) in the feline mesenteric and hindquarters vascular beds. *Eur J Pharmacol* 234:35-42, 1993
273. McNamara DB, Bedi B, Aurora H, Tena L, Ignarro LJ, Kadowitz PJ, Akers DL. L-Arginine inhibits balloon catheter-induced intimal hyperplasia. *Biochem Biophys Res Commun* 193: 291-296, 1993
274. Wang R, Higuera TR, Sikka SC, Minkes RK, Bellan JA, Kadowitz PJ, Domer FR, Hellstrom WJ. Penile erections induced by vasoactive intestinal peptide and sodium nitroprusside. *Urol Res* 21:75-78, 1993
275. Santiago JA, Garrison EA, Kadowitz PJ. Comparative effects of N<sup>ω</sup>-nitro-L-arginine methyl ester on vasodilator responses to acetylcholine, bradykinin, and substance P. *Eur J Pharmacol* 254:207-212, 1994
276. Cheng DY, DeWitt BJ, McMahon TJ, Kadowitz PJ. Comparison of pressor responses to angiotensin I, II, and III in the pulmonary vascular bed of cats. *Am J Physiol* 266:H2247-H2255, 1994
277. Cheng DY, DeWitt BJ, McMahon TJ, Kadowitz PJ. Comparative effects of L-NNA and alkyl esters of L-NNA on pulmonary vasodilator responses to ACh, BK, and SP. *Am J Physiol* 266: H2416-H2422, 1994
278. DeWitt BJ, Cheng DY, McMahon TJ, Nossaman BD, Kadowitz PJ. Analysis of responses to bradykinin in the pulmonary vascular bed of the cat. *Am J Physiol* 266:H2256-H2267, 1994
279. Nossaman BD, Feng CJ, Kadowitz PJ. Analysis of responses to bradykinin and influence of HOE 140 in the isolated perfused rat lung. *Am J Physiol* 266:H2452-H2461, 1994

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 24

*Publications (cont'd):*

280. Nossaman BD, Feng C-J, Wang J, Kadowitz PJ. Analysis of angiotensins I, II, and III in pulmonary vascular bed of the rat. *Am J Physiol* 266:L389-L396, 1994
281. DeWitt BJ, Cheng DY, Caminiti GN, Nossaman BD, Coy DH, Murphy WA, Kadowitz PJ. Comparison of responses to adrenomedullin and calcitonin gene-related peptide in the pulmonary vascular bed of the cat. *Eur J Pharmacol* 257:303-306, 1994
282. Santiago JA, Garrison EA, Ventura VL, Coy DH, Bitar K, Murphy WA, McNamara DB, Kadowitz PJ. Synthetic human adrenomedullin and adrenomedullin 15-52 have potent short-lived vasodilator activity in the hindlimb vascular bed of the cat. *Life Sci* 55:PL85-PL90, 1994
283. Santiago JA, Garrison EA, Kadowitz PJ. Analysis of responses to bradykinin: effects of Hoe 140 in the hindquarters vascular bed of the cat. *Am J Physiol* 267:H828-H836, 1994
284. Hellstrom WJG, Monga M, Wang R, Domer FR, Kadowitz PJ, Roberts JA. Penile erection in the primate: induction with nitric oxide donors. *J Urol* 151:1723-1727, 1994
285. Hellstrom WJG Wang R, Kadowitz PJ, Domer FL. Potassium channel agonists cause penile erection in cats. *Intl J Impotence Res* 4:35-43, 1994
286. Cheng DY, Feng C-J, Kadowitz PJ, Gruetter CA. Effects of 17 $\beta$ -estradiol on endothelium-dependent relaxation induced by acetylcholine in female rat aorta. *Life Sci* 55:PL187-PL191, 1994
287. Feng C-J, Kang B, Kaye AD, Kadowitz PJ, Nossaman BD. L-NAME modulates responses to adrenomedullin in the hindquarters vascular bed of the rat. *Life Sci* 55:PL433-PL438, 1994
288. DeWitt BJ, Cheng DY, Kadowitz PJ. Des-arg<sup>9</sup>-bradykinin produces tone-dependent kinin B1-receptor-mediated responses in the pulmonary vascular bed. *Circ Res* 75:1064-1072, 1994
289. Feng C-J, Cheng DY, Kaye AD, Kadowitz PJ, Nossaman BD. Influence of N<sup>ω</sup>-nitro-L-arginine methyl ester, LY83583, glybenclamide and L158,809 on pulmonary circulation. *Eur J Pharmacol* 263:133-140, 1994
290. Cheng DY, DeWitt BJ, Wegmann MJ, Coy DH, Bitar K, Murphy WA, Kadowitz PJ. Synthetic human adrenomedullin and ADM15-52 have potent short-lasting vasodilator activity in the pulmonary vascular bed of the cat. *Life Sci* 55:PL251-PL256, 1994
291. Cheng DY, DeWitt BJ, Dent EL, Nossaman BD, Kadowitz PJ. Analysis of responses to angiotensin IV in the pulmonary vascular bed of the cat. *Eur J Pharmacol* 261:223-227, 1994
292. Santiago JA, Garrison EA, Champion HC, Smith RE, Del Rio O, Kadowitz PJ. Analysis of responses to kallidin, DABK, and DAK in feline hindlimb vascular bed. *Am J Physiol* 269:H2057-H2064, 1995
293. Santiago JA, Garrison E, Purnell WL, Smith RE, Champion HC, Coy DH, Murphy WA, Kadowitz PJ. Comparison of responses to adrenomedullin and adrenomedullin analogs in the mesenteric vascular bed of the cat. *Eur J Pharmacol* 272:115-118, 1995

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 25

*Publications (cont'd):*

294. Kaye AD, Nossaman BD, Ibrahim IN, DeWitt BJ, Feng C-J, Kadowitz PJ. Analysis of thromboxane receptor-mediated responses in the feline pulmonary vascular bed. *Crit Care Med* 23:164-170, 1995
295. Garrison EA, Santiago JA, Osei SY, Kadowitz PJ. Analysis of responses to angiotensin peptides in the hindquarters vascular bed of the cat. *Am J Physiol* 268:H2418-2425, 1995
296. Kaye AD, Nossaman BD, Margolis MA, Ibrahim IN, Kivlighn SD, Smith DE, Kadowitz PJ. Responses to a nonpeptide angiotensin receptor agonist, L 163491, in the feline pulmonary vascular bed. *Life Sci* 57:PL301-PL305, 1995
297. Kaye AD, Nossaman BD, Ibrahim IN, Kadowitz PJ. Influence of phospholipase C and myosin light chain kinase inhibitors and the role of L-calcium channels in the cat pulmonary vascular bed. *Am J Physiol* 269:L507-L513, 1995
298. Morris JL, Gibbins IL, Kadowitz PJ, Herzog H, Kreulen DL, Toda N, Claing A. Roles of peptides and other substances in co-transmission from vascular autonomic and sensory neurons. *Can J Physiol Pharmacol* 73:521-532, 1995
299. Minkes RK, Santiago JA, McMahon TJ, Kadowitz PJ. Role of  $K^{+}_{ATP}$  channels and endothelium-derived relaxing factor in reactive hyperemia in the hindquarters vascular bed of cats. *Am J Physiol* 269:H1704-H1712, 1995
300. Kaye AD, Nossaman BD, Ibrahim IN, Feng C-J, McNamara DB, Agrawal KC, Kadowitz PJ. Analysis of responses of allicin, a compound from garlic, in the pulmonary vascular bed of the cat and in the rat. *Eur J Pharmacol* 276:21-26, 1995
301. Kaye AD, Nossaman BD, Ibrahim I, Feng C-J, Kadowitz PJ. Influence of protein kinase C inhibitors on vasoconstrictor responses in the pulmonary vascular bed of cat and rat. *Am J Physiol* 268:L532-L538, 1995
302. Nossaman BD, Kaye A, Gitlin MC, Kadowitz PJ, Feng C-J.  $N^{\omega}$ -L-nitro-L-arginine benzyl ester enhances pulmonary vasopressor responses to hypoxia and to angiotensin II. *Am J Ther* 2: 462-468, 1995
303. Jahr JS, Kang B, Kaye AD, Paxtor C, Feng CJ, Kadowitz PJ, Nossaman BD. Analysis of responses to vancomycin in carotid blood flow in the male rat. *J Med* 26:175-182, 1995
304. Pierce RL, Pierce MR, Liu H, Kadowitz PJ, Miller MJS. Limb reduction defects after prenatal inhibition of nitric oxide synthase in rats. *Pediatr Res* 38:905-911, 1995
305. Kaye AD, Nossaman BD, Kivlighn S, Ibrahim IN, De Witt BJ, Kadowitz PJ. Responses to L-163491, a nonpeptide angiotensin II mimic, in the pulmonary vascular bed of the cat. *Eur J Pharmacol* 287:163-168, 1995
306. man BD, Feng C-J, Kaye AD, Kadowitz PJ. Analysis of responses to ANG IV: effects of PD-123319 and DuP-753 in the pulmonary circulation of the rat. *Am J Physiol* 268:L302-308, 1995

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 26

*Publications (cont'd):*

307. R, Domer FR, Sikka SC, Kadowitz PJ, Hellstrom WJ. Nitric oxide mediates penile erection in cats. *J Urol* 125:234-237, 1995
308. Nossaman BD, Feng C-J, Cheng DY, De Witt BJ, Coy DH, Murphy WA, Kadowitz PJ. Comparative effects of adrenomedullin, an adrenomedullin analog, and CG15930 on the pulmonary vascular bed of the cat and rat. *Life Sci* 56:PL63-PL66, 1995
309. Cheng DY, DeWitt BJ, Suzuki F, Neely CF, Kadowitz PJ. Adenosine A<sub>1</sub> and A<sub>2</sub> receptors mediate tone-dependent responses in feline pulmonary vascular bed. *Am J Physiol* 270:H200-H207, 1996
310. Skimming JW, DeMarco VG, Kadowitz PJ, Cassin S. Effects of Zaprinast and dissolved nitric oxide on the pulmonary circulation of fetal sheep. *Pediatr Res* 39:223-228, 1996
311. Majid DSA, Kadowitz PJ, Coy DH, Navar LG. Renal responses to intra-arterial administration of adrenomedullin in dogs. *Am J Physiol* 270:F200-F205, 1996
312. Garrison EA, Kadowitz PJ. Analysis of responses to angiotensin I-(3-10) in the hindlimb vascular bed of the cat. *Am J Physiol* 270:H1172-H1177, 1996
313. Ascuitto RJ, Ross-Ascuitto NT, Waddell AE, Kadowitz PJ. Contractile and coronary vascular effects of pituitary adenylate cyclase activating polypeptide in neonatal pig hearts. *Cardiovasc Res* 31:E153-E159, 1996
314. Champion HC, Duperier CD, Fitzgerald WE, Lambert DG, Murphy WA, Coy DH, Kadowitz PJ. [MPR<sup>14</sup>]-rADM(14-50), a novel analog of adrenomedullin, possesses potent vasodilator activity in the hindlimb vascular bed of the cat. *Life Sci* 59:PL1-PL7, 1996
315. Nossaman BD, Feng C-J, Kaye AD, DeWitt BF, Coy DH, Murphy WA, Kadowitz PJ. Pulmonary vasodilator responses to adrenomedullin are reduced by nitric oxide synthase inhibitors in rats but not in cats. *Am J Physiol* 270:L782-L789, 1996
316. Smith DE, Kaye AD, Feng C-J, Kadowitz PJ, Nossaman BD. Comparative effects of N<sup>ω</sup>-L-nitro-L-arginine methyl ester and N<sup>ω</sup>-L-nitro-L-arginine benzyl ester in the mesenteric circulation of the rat. *Am J Ther* 3:314-320, 1996
317. Lian TS, Bellan JA, Jahr JS, Holton RH, Nossaman BD, Kadowitz PJ. Vasodilator responses to desmopressin and its diluent, chlorobutanol, in the hindquarters vascular bed of the cat. *J Med* 27:73-87, 1996
318. Champion HC, Garrison EA, Estrada LS, Potter JM, Kadowitz PJ. Analysis of responses to angiotensin I and angiotensin I-(3-10) in the mesenteric vascular bed of the cat. *Eur J Pharmacol* 309:251-259, 1996

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 27

*Publications (cont'd):*

319. Champion HC, Santiago JA, Garrison EA, Cheng DY, Coy DH, Murphy WA, Ascuitto RJ, Ross-Ascuitto NT, McNamara DB, Kadowitz PJ. Analysis of cardiovascular responses to PACAP-27, PACAP-38, and vasoactive intestinal polypeptide. *Ann NY Acad Sci* 805:429-441, 1996
320. De Witt BJ, Cheng DY, McMahon TJ, Marrone JR, Champion HC, Kadowitz PJ. Differential effects of U-37883A, a novel  $K^+$ <sub>ATP</sub> channel antagonist, in the pulmonary and hindlimb vascular beds of the cat. *Am J Physiol* 271:L924-L931, 1996
321. Kaye AD, Ibrahim IN, Kadowitz PJ, Nossaman BD. Analysis of responses to pentoxifylline in the pulmonary vascular bed of the cat. *Crit Care Med* 24:263-267, 1996
322. Champion HC, Fry RC, Murphy WA, Coy DH, Kadowitz PJ. Catecholamine release mediates pressor effects to adrenomedullin(15-22) in the rat. *Hypertension* 28:1041-1046, 1996
323. Champion HC, Santiago JA, Murphy WA, Coy DH, Kadowitz PJ. Adrenomedullin(22-52) antagonizes vasodilator responses to calcitonin gene-related peptide but not adrenomedullin in the cat. *Am J Physiol* 272:R234-R242, 1997
324. Champion HC, Erickson CC III, Simoneaux ML, Bivalacqua TJ, Murphy WA, Coy DH, Kadowitz PJ. Proadrenomedullin NH<sub>2</sub>-terminal peptide has cAMP-mediated vasodilator activity in the mesenteric vascular bed of the cat. *Peptides* 17:1379-1387, 1997
325. Fry RC, Champion HC, Lawrence TC, Murphy WA, Coy DH, Kadowitz PJ. Proadrenomedullin NH<sub>2</sub>-terminal peptide (PAMP)(12-20) has vasodepressor activity in the rat and cat. *Life Sci* 60: PL161-PL167, 1997
326. Santiago JA, Champion HC, Kadowitz PJ. T-kinin has endothelium-dependent vasodilator activity in the cat. *Am J Physiol* 272:H1491-H1498, 1997
327. Champion HC, Murphy WA, Coy DH, Kadowitz PJ. Proadrenomedullin NH<sub>2</sub>-terminal 20 peptide has direct vasodilator activity in the cat. *Am J Physiol* 272:R1047-R1054, 1997
328. Champion HC, Friedman DE, Lambert DG, Murphy WA, Coy DH, Kadowitz PJ. Adrenomedullin(16-31) has pressor activity in the rat but not the cat. *Peptides* 18:133-136, 1997
329. Champion HC, Wang R, Shenassa BB, Murphy WA, Coy DH, Hellstrom WJ, Kadowitz PJ. Adrenomedullin induces penile erection in the cat. *Eur J Pharmacol* 319:71-75, 1997
330. Champion HC, Kadowitz PJ. Nociceptin, an endogenous ligand for the ORL<sub>1</sub> receptor, has novel hypotensive activity in the rat. *Life Sci* 60:PL241-PL245, 1997
331. Champion HC, Wang R, Santiago JA, Murphy WA, Coy DH, Kadowitz PJ, Hellstrom WJG. Comparison of responses to adrenomedullin and calcitonin gene-related peptide in the feline erection model. *J Androl* 18:513-521, 1997

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 28

*Publications (cont'd):*

332. De Witt BJ, Champion HC, Marrone JR, McNamara DB, Giles TD, Greenberg SS, Kadowitz PJ. Differential effects of L-N<sup>5</sup>-(1-iminoethyl)-ornithine on tone and endothelium-dependent vasodilator responses. *Am J Physiol* : L588-L594, 1997
333. Champion HC, Wang R, Hellstrom WJG, Kadowitz PJ. Nociceptin, a novel endogenous ligand for the ORL<sub>1</sub> receptor, has potent erectile activity in the cat. *Am J Physiol* 273:E214-E219, 1997
334. Champion HC, Lambert DG, McWilliams SM, Shah MK, Murphy WA, Coy DH, Kadowitz PJ. Comparison of responses to rat and human adrenomedullin in the hindlimb vascular bed of the cat. *Regul Pept* 70:161-165, 1997
335. Champion HC, Kadowitz PJ. Analysis of effects of candesartan in the mesenteric vascular bed of the cat. *Hypertension* 30:1260-1266, 1997
336. Champion HC, Czapla M, Friedman DE, Lambert DE, Murphy WA, Coy DH, Kadowitz PJ. Tone-dependent vasodilator responses to proadrenomedullin NH<sub>2</sub>-terminal 20 peptide in the hindquarters vascular bed of the rat. *Peptides* 18:513-519, 1997
337. Champion HC, Czapla MA, Kadowitz PJ. Nociceptin, an endogenous ligand for the ORL<sub>1</sub> receptor, decreases cardiac output and total peripheral resistance in the rat. *Peptides* 18: 729-732, 1997
338. Czapla MA, Champion HC, Kadowitz PJ. Nociceptin, an endogenous ligand for the ORL<sub>1</sub> receptor, has vasodilator activity in the hindquarters vascular bed of the rat. *Peptides* 18:793-795, 1997
339. Champion HC, Santiago JA, Czapla MA, Bivalacqua TJ, Inglefritz C, Kadowitz PJ. Comparison of responses to T-kinin and bradykinin in the mesenteric vascular bed of the cat. *Peptides* 18:1357-1364, 1997
340. Champion HC, Kadowitz PJ. Vasodilator responses to acetylcholine, bradykinin, and substance P are mediated by a TEA-sensitive mechanism. *Am J Physiol* 42:R414-R422, 1997
341. Champion HC, Kadowitz PJ. Nitric oxide release and the opening of K<sup>+</sup><sub>ATP</sub> channels mediate vasodilator responses to histamine in the cat. *Am J Physiol* 273:H928-H937, 1997
342. Champion HC, Kadowitz PJ. [Tyr<sup>1</sup>]-nociceptin, a novel nociceptin analog, decreases systemic arterial pressure by a naloxone-insensitive mechanism in the rat. *Biochem Biophys Res Commun* 234:309-312, 1997
343. Nossaman BD, Kaye AD, Champion HC, Kang B, Feng C-J, Kadowitz PJ. Effects of phentolamine on responses to PAMP in the hindquarters vascular bed of the rat. *J Cardiovasc Pharmacol Ther* 2:153-157, 1997

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 29

*Publications (cont'd):*

344. Czapla MA, Champion HC, Kadowitz PJ. Decreases in systemic arterial and hindquarters perfusion pressure in response to nociceptin are not inhibited by naloxone in the rat. *Peptides* 18:1197-1200, 1997
345. Champion HC, Zadina JE, Kastin AJ, Hackler L, Ge LJ, Kadowitz PJ. Endomorphin 1 and 2, endogenous ligands for the  $\mu$ -opioid receptor, decrease cardiac output and total peripheral resistance in the rat. *Peptides* 18:1393-1397, 1997
346. Champion HC, Zadina JE, Kastin AJ, Hackler L, Ge LJ, Kadowitz PJ. The endogenous  $\mu$ -opioid receptor agonists, endomorphins 1 and 2, have novel hypotensive activity in the rabbit. *Biochem Biophys Res Commun* 235:567-570, 1997
347. Champion HC, Akers DL, Santiago JA, Lambert DG, McNamara DB, Kadowitz PJ. Analysis of responses to human synthetic adrenomedullin and calcitonin gene-related peptides in the hindlimb vascular bed of the cat. *Mol Cell Biochem* 176:5-11, 1997
348. Cook ME, Wallin JD, Thakur VD, Kadowitz PJ, McNamara DB, Garcia MM, Lipani JA, Poland M. Comparative effects of nabumetone, sulindac, and ibuprofen on renal function. *J Rheumatol* 24:1137-1144, 1997
349. Akers DL, Lefer DJ, Chen IL, Wilkens RG, Rice J, Aurora H, Osgood TA, Bedi B, Tenaglia AN, Buda AJ, Kadowitz PJ, McNamara DB. Effect of short-term treatment with a monoclonal antibody to P-selectin on balloon catheter-induced: intimal hyperplasia, re-endothelialization, and attenuation of endothelial-dependent relaxation. *Mol Cell Biochem* 176:13-20, 1997
350. Garrison EA, Champion HC, Kadowitz PJ. Pro<sup>11</sup>,D-Ala<sup>12</sup> angiotensin I has rapid onset vasoconstrictor activity in the cat. *Am J Physiol* 273:E1059-E1064, 1997
351. Champion HC, Zadina JE, Kastin AJ, Kadowitz PJ. The endogenous  $\mu$ -opioid agonists, endomorphin 1 and 2, have vasodilator activity in the hindquarters vascular bed of the rat. *Life Sci* 61:PL409-PL415, 1997
352. Kaye AD, Nossaman BD, Smith DE, Ibrahim IN, Imig JD, Kadowitz PJ. Effects of phospholipase A<sub>2</sub>, 12-lipoxygenase, and cyclooxygenase inhibitor in the feline pulmonary bed. *Am J Physiol* 272:L573-L579, 1997
353. Nossaman BD, Kaye AD, Feng CJ, Kang B, Kadowitz PJ. Analysis of responses to bradykinin in the rat hindquarters vascular bed. *Am J Physiol* 272:R631-R639, 1997
354. Nossaman BD, Kaye AD, Kang B, Feng CJ, Kadowitz PJ. Effects of captopril on responses to bradykinin in the hindquarters vascular bed of the rat. *Peptides* 18:491-494, 1997
355. Nossaman BD, Kaye AD, Feng C-J, Kadowitz PJ. Effects of charybdotoxin on responses to nitrosovasodilators and hypoxia in rat lung. *Am J Physiol* 272:L787-L791, 1997

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 30

*Publications (cont'd):*

356. Kaye AD, Nossaman BD, Santiago JA, De Witt BJ, Ibrahim IN, Kadowitz PJ. Differential effects of glibenclamide on responses to thromboxane A<sub>2</sub> mimic U46619, in the pulmonary and hindquarters vascular beds of the cat. *Eur J Pharmacol* 340:187-193, 1997
357. Champion HC, Kadowitz PJ. [ $\text{Tyr}^1$ ]-Nociceptin has naloxone-insensitive vasodilator activity in the hindquarters vascular bed of the rat. *Life Sci* 61:PL403-PL408, 1998
358. Czapla MA, Champion HC, Zadina JE, Kastin AJ, Hackler L, Ge LJ, Kadowitz PJ. Endomorphin 1 and 2, endogenous  $\mu$ -opioid agonists, decreased systemic arterial pressure in the rat. *Life Sci* 62:PL175-PL179, 1998
359. Champion HC, Czapla MA, Kadowitz PJ. Responses to angiotensin peptides are mediated by AT<sub>1</sub> receptors in the rat. *Am J Physiol* 274:E115-E123, 1998
360. Hyman AL, Hao Q, Tower A, Kadowitz PJ, Champion HC, Gumusel B, Lippton H. Novel catheterization technique for the *in vivo* measurement of pulmonary vascular responses in rats. *Am J Physiol* 274:H1218-H1229, 1998
361. Gumusel B, Hao Q, Hyman AL, Kadowitz PJ, Champion HC, Chang JK, Mehta JL, Lippton H. Analysis of responses to adrenomedullin-(13-52) in the pulmonary vascular bed of rats. *Am J Physiol* 274:H1255-H1263, 1998
362. Schiller NK, Champion HC, Huggins SY, Timothy AL, Murphy WA, Coy DH, Peter JR, Kadowitz PJ, McNamara DB. Adrenomedullin does not inhibit human platelet aggregation. *J Cardiovasc Pharmacol Ther* 3:223-228, 1998
363. Bivalacqua TJ, Rajasekaran M, Champion HC, Wang R, Sikka SC, Kadowitz PJ, Hellstrom WJ. The influence of castration on pharmacologically induced penile erection in the cat. *J Androl* 19:551-557, 1998
364. Kaye AD, Banister RE, Anwar M, Feng CJ, Kadowitz PJ, Nossaman BD. Pulmonary vasodilation by ketamine is mediated in part by L-type calcium channels. *Anesth Analg* 87: 956-962, 1998
365. Champion HC, Kadowitz PJ. R-( $\text{--}$ )- $\alpha$ -methyl-histamine has nitric oxide-mediated vasodilator activity in the mesenteric vascular bed of the cat. *Eur J Pharmacol* 343:209-216, 1998
366. Champion HC, Kadowitz PJ. Influence of nimodipine on vasoconstrictor responses in the hindquarters vascular bed of the cat. *J Pharm Pharmacol* 50:673-680, 1998
367. Champion HC, Kadowitz PJ. [D-Ala<sup>2</sup>]-endomorphin 2 and endomorphin 2 have nitric oxide-dependent vasodilator activity in rats. *Am J Physiol* 274:H1670-H1697, 1998
368. Lambert DG, Champion HC, Kadowitz PJ. Inhibitory effects of candesartan on responses to angiotensin peptides in the hindquarters vascular bed of the cat. *Can J Physiol Pharmacol* 76: 133-140, 1998

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 31

*Publications (cont'd):*

369. Champion HC, Estrada LS, Estrada LN, Filep JG, Kadowitz PJ. Analysis of effects of bosentan (Ro 47-0103), a nonpeptide ET<sub>A</sub>/ET<sub>B</sub> receptor antagonist, in the hindlimb vascular bed of the cat. *Can J Physiol Pharmacol* 76:141-147, 1998
370. Belloni AS, Meneghelli V, Champion HC, Murphy WA, Coy DH, Kadowitz PJ, Nussdorfer GG. Autoradiographic evidence that zona glomerulosa and capsular vessels of the human adrenal cortex are provided with different subtypes of adrenomedullin receptors. *Peptides* 19:1581-1584, 1998
371. Belloni AS, Andreis PG, Rossi GP, Mingrino A, Champion HC, Kadowitz PJ, Murphy WA, Coy DH, Nussdorfer GG. Inhibitory effect of adrenomedullin (ADM) on the aldosterone response of human adrenocortical cells to angiotensin II: role of ADM-(22-52)-sensitive receptors. *Life Sci* 63:2313-2321, 1998
372. Kaye AD, Nossaman BD, Smith DE, Ibrahim IN, Anwar M, Kadowitz PJ. Analysis of responses to angiotensin I (3-10) and Leu3 angiotensin (3-8) in the pulmonary vascular bed of the cat. *Am J Ther* 5:295-302, 1998
373. Champion HC, Bivalacqua TJ, Rauchwarger A, McWilliams SM, McNamara DB, Kadowitz PJ. Analysis of vasodepressor responses to nociceptin and nociceptin analogs in the systemic vascular bed of the anesthetized rabbit *in vivo*. *J Cardiovasc Pharmacol Ther* 3: 247-252, 1998
374. Champion HC, Pierce RL, Kadowitz PJ. Nociceptin, a novel endogenous ligand for ORL<sub>1</sub> receptor, dilates isolated resistance arteries from the rat. *Regul Pept* 78:69-74, 1998
375. Champion HC, Bivalacqua TJ, Wang R, Hellstrom WJG, Kadowitz PJ. [Tyr<sup>1</sup>]-nociceptin and nociceptin have similar naloxone insensitive erectile activity in the cat. *J Androl* 19:747-753, 1998
376. McNamara DB, Champion HC, Kadowitz PJ. Pharmacologic management of peripheral vascular disease. *Surg Clin North Am* 78:447-464, 1998
377. Champion HC, Bivalacqua TJ, Friedman DE, Zadina JE, Kastin AJ, Kadowitz PJ. Nitric oxide release mediates vasodilator responses to endomorphin 1 but not nociceptin/OFQ in the hindquarters vascular bed of the rat. *Peptides* 19:1595-1602, 1998
378. Belloni AS, Andreis PG, Rossi GP, Champion HC, Kadowitz PJ, Murphy WA, Coy DH, Nussdorfer GG. Structure-activity relationships of adrenomedullin in the adrenal gland. *Endocrinol Res* 24:729-730, 1998
379. Nossaman BD, Champion HC, Kaye AD, Anwar M, Feng CJ, Kadowitz PJ. Nociceptin has vasodilator activity in the pulmonary vascular bed of the rat. *J Cardiovasc Pharmacol Ther* 3: 253-258, 1998
380. Champion HC, Zadina JE, Kastin AJ, Kadowitz PJ. Endomorphin 1 and 2 have vasodepressor activity in the anesthetized mouse. *Peptides* 19:925-929, 1998

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 32

*Publications (cont'd):*

381. Champion HC, Bivalacqua TJ, Lambert DG, McWilliams SM, Zadina JE, Kastin AJ, Kadowitz PJ. Endomorphin 1 and 2, the endogenous  $\mu$ -opioid agonists, produce biphasic changes in systemic arterial pressure in the cat. *Life Sci* 63:PL131-136, 1998
382. Champion HC, Bivalacqua TJ, Lambert DG, McNamara DB, Kadowitz PJ. The influence of candesartan and PD123319 on responses to angiotensin II in the hindquarters vascular bed of the rat. *J Am Soc Nephrol* 10:S95-S97, 1999
383. Bivalacqua TJ, Dalal A, Lambert DG, Champion HC, Kadowitz PJ. Effects of candesartan and PD123319 on responses to angiotensin II in the anesthetized mouse. *J Am Soc Nephrol* 10:S98-S100, 1999
384. Champion HC, Bivalacqua TJ, Lambert DG, McNamara DB, Kadowitz PJ. Analysis of the effects of candesartan on responses to angiotensin II in the hindquarters vascular bed of the cat. *J Am Soc Nephrol* 10:S101-S103, 1999
385. Champion HC, Kadowitz PJ. Vasodepressor responses to [D-Ala<sup>2</sup>]-endomorphin 2 (TAPP) are mediated by an L-NAME-sensitive mechanism in the rat. *J Cardiovasc Pharmacol* 33:280-284, 1999
386. Belloni AS, Andreis PG, Meneghelli V, Champion HC, Kadowitz PJ, Coy DH, Murphy WA, Nussdorfer GG. Adrenomedullin and calcitonin gene-related peptide (CGRP) interact with a common receptor of the CGRP1 subtype in the human adrenal zona glomerulosa. *Endocr Res* 25:29-34, 1999
387. Champion HC, Bivalacqua TJ, D'Souza FM, Ortiz LA, Jeer JR, Toyoda K, Heisted DD, Hyman AL, Kadowitz PJ. Gene transfer of endothelial nitric oxide synthase to the lung of the mouse *in vivo*. Effect on agonist-induced and flow-mediated vascular responses. *Circ Res* 84:1422-1432, 1999
388. Belloni AS, Rossi GP, Andreis PG, Aragona F, Champion HC, Kadowitz PJ, Murphy WA, Coy DH, Nussdorfer GG. Proadrenomedullin N-terminal 20 peptide (PAMP), acting through PAMP(12-20)-sensitive receptors, inhibits Ca<sup>2+</sup>-dependent, agonist-stimulated secretion of human adrenal glands. *Hypertension* 33:1185-1189, 1999
389. Champion HC, Bivalacqua TJ, Wang R, Kadowitz PJ, Keefer LK, Saavedra JE, Hrabie JA, Doherty PC, Hellstrom WJ. Induction of penile erection by intracavernosal and transurethral administration of novel nitric oxide donors in the cat. *J Urol* 161:2013-2019, 1999
390. Schiller NK, Timothy AM, Chen IL, Rice JC, Akers DL, Kadowitz PJ, McNamara DB. Endothelial cell regrowth and morphology after balloon catheter injury of alloxan-induced diabetic rabbits. *Am J Physiol* 277:H740-H748, 1999
391. Champion HC, Bivalacqua TJ, Lambert DG, Abassi RA, Kadowitz PJ. Analysis of vasoconstrictor responses to histamine in the hindlimb vascular bed of the rabbit. *Am J Physiol* 277:R1179-R1187, 1999

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 33

*Publications (cont'd):*

392. Bivalacqua TJ, Champion HC, Rajasekaran M, Sikka SC, Kadowitz PJ, Doherty PC, Hellstrom WJG. Potentiation of erectile response and cAMP accumulation by combination of prostaglandin E<sub>1</sub> and rolipram, a selective inhibitor of the type 4 phosphodiesterase (PDE 4). *J Urol* 162:1848-1855, 1999
393. Bivalacqua TJ, Dalal A, Champion HC, Kadowitz PJ. Role of AT<sub>1</sub> receptors and autonomic nervous system in mediating acute pressor responses to ANG II in anesthetized mice. *Am J Physiol* 277:E838-E847, 1999
394. Champion HC, Bivalacqua TJ, Hyman AL, Ignarro LJ, Hellstrom WJ, Kadowitz PJ. Gene transfer of endothelial nitric oxide synthase to the penis augments erectile responses in the aged rat. *Proc Natl Acad Sci USA* 96:11648-11652, 1999
395. Champion HC, Nussdorfer GG, Kadowitz PJ. Structure-activity relationships of adrenomedullin in the circulation and adrenal gland. *Regul Pept* 85:1-8, 1999
396. Champion HC, Bivalacqua TJ, Zadina JE, Kastin AJ, Kadowitz PJ. Vasodilator responses to the endomorphin peptides, but not nociceptin/OFQ, are mediated by nitric oxide release. *Ann NY Acad Sci* 897:165-172, 1999
397. Mazzocchi G, Albertin G, Andreis PG, Neri G, Malendowicz LK, Champion HC, Bahcelioglu M, Kadowitz PJ, Nussdorfer GG. Distribution, functional role, and signaling mechanism of adrenomedullin receptors in the rat adrenal gland. *Peptides* 20:1479-1487, 1999
398. Champion HC, Bivalacqua TJ, Toyoda K, Heistad DD, Hyman AL, Kadowitz PJ. *In vivo* gene transfer of prepro-calcitonin gene-related peptide to the lung attenuates chronic hypoxia-induced pulmonary hypertension in the mouse. *Circulation* 101:923-930, 2000
399. Champion HC, Villnave DJ, Tower A, Kadowitz PJ, Hyman AL. A novel right-heart catheterization technique for *in vivo* measurement of vascular responses in lungs of intact mice. *Am J Physiol* 278:H8-H15, 2000
400. Bivalacqua TJ, Champion HC, Wang R, Kadowitz PJ, Doherty PC, Hellstrom WJG. Feline penile erection induced by transurethral administration of sodium nitroprusside. *Urol Res* 27: 432-436, 1999
401. Bivalacqua TJ, Diner EK, Novak TE, Vohra Y, Sikka SC, Champion HC, Kadowitz PJ, Hellstrom WJG. A rat model of Peyronie's disease associated with a decrease in erectile activity and an increase in inducible nitric oxide synthase protein expression. *J Urol* 163: 1992-1998, 2000
402. Bivalacqua TJ, Champion HC, Purohit SK, Murphy WA, Coy DH, Kadowitz PJ, Hellstrom WJG. Nitric oxide-mediated erectile effects of galantide but not galanin *in vivo*. *Nitric Oxide* 4: 94-102, 2000

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 34

*Publications (cont'd):*

403. Kaye AD, De Witt BJ, Anwar M, Smith DE, Feng CJ, Kadowitz PJ, Nossaman BD. Analysis of responses of garlic derivatives in the pulmonary vascular bed of the rat. *J Appl Physiol* 89: 353-358, 2000
404. De Witt BJ, Garrison EA, Champion HC, Kadowitz PJ. L-163,491 is a partial angiotensin AT<sub>1</sub> receptor agonist in the hindquarters vascular bed of the cat. *Eur J Pharmacol* 404:213-219, 2000
405. Huggins S, Champion HC, Cheng G, Kadowitz PJ, Jeter JR Jr. Vasodilator responses to endomorphins, nociceptin, albuterol, and adrenomedullin in isolated rat aorta. *Life Sci* 67: 471-476, 2000
406. Bivalacqua TJ, Champion HC, Mehta YS, Abdel-Mageed AB, Sikka SC, Ignarro LJ, Kadowitz PJ, Hellstrom WJ. Adenoviral gene transfer of endothelial nitric oxide synthase (eNOS) to the penis improves age-related erectile dysfunction in the rat. *Int J Impot Res* 12:S8-S17, 2000
407. De Witt BJ, Marrone JR, Kadowitz PJ. Comparison of responses to siguazodan, rolipram, and zaprinast in the feline pulmonary vascular bed. *Eur J Pharmacol* 406:233-238, 2000
408. Bivalacqua TJ, Champion HC, Hellstrom WJ, Kadowitz PJ. Pharmacotherapy for erectile dysfunction. *Trends Pharmacol Sci* 21:484-489, 2000
409. Doherty PC, Bivalacqua TJ, Champion HC, Kadowitz PJ, Meerveld BG, Berzetei-Gurske I, Hellstrom WJ. Direct effects of selective type 5 phosphodiesterase inhibitors alone or with other vasodilators on the erectile response in cats. *J Urol* 165:1004-1009, 2001
410. Bivalacqua TJ, Champion HC, Leungwattanakij S, Yang DY, Hyun JS, Abdel-Mageed AB, Sikka SC, Kadowitz PJ, Hellstrom WJ. Evaluation of nitric oxide synthase and arginase in the induction of a Peyronie's-like condition in the rat. *J Androl* 22:497-506, 2001
411. Hyman AL, De Witt BJ, Gumusel B, Hao Q, Kadowitz PJ, Lippton HL. L-NAME enhances responses to atrial natriuretic peptide in the pulmonary vascular bed of the cat. *J Appl Physiol* 90:2101-2108, 2001
412. Bivalacqua TJ, Hellstrom WJ, Kadowitz PJ, Champion HC. Increased expression of arginase II in human diabetic corpus cavernosum: in diabetic-associated erectile dysfunction. *Biochem Biophys Res Commun* 283:923-927, 2001
413. Champion HC, Pierce RL, Bivalacqua TJ, Murphy WA, Coy DH, Kadowitz PJ. Analysis of responses to hAmylin, hCGRP, and hADM in isolated resistance arteries from the mesenteric vascular bed of the rat. *Peptides* 22:1427-1434, 2001
414. Bivalacqua TJ, Champion HC, De Witt BJ, Saavedra JE, Hrabie JA, Keefer LK, Kadowitz PJ. Analysis of vasodilator responses to novel nitric oxide donors in the hindquarters vascular bed of the cat. *J Cardiovasc Pharmacol* 38(1):120-129, 2001

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 35

*Publications (cont'd):*

415. Shah MK, Bivalacqua TJ, Champion HC, Kadowitz PJ. Vasodilator responses to ATP and UTP are cAMP dependent in the mesenteric vascular bed of the cat. *J Cardiovasc Pharmacol Ther* 6:287-295, 2001
416. Bivalacqua TJ, Champion HC, Abdel-Mageed AB, Kadowitz PJ, Hellstrom WJ. Gene transfer of prepro-calcitonin gene-related peptide restores erectile function in the aged rat. *Biol Reprod* 65(5):1371-1377, 2001
417. Shah MK, Champion HC, Bivalacqua TJ, Kadowitz PJ. Differential responses to ATP<sub>y</sub>S in the mesenteric and hindlimb vascular bed of the cat. *Life Sci* 69:2561-2571, 2001
418. De Witt BJ, Marrone JR, Kaye AD, Keefer LK, Kadowitz PJ. Comparison of responses to novel nitric oxide donors in the feline pulmonary vascular bed. *Eur J Pharmacol* 430:311-315, 2001
419. Koshy P, Self A, Kadowitz PJ, Fonseca VA, McNamara DB. Effects of low-dose candesartan on the rate of re-endothelialization following vascular wound healing. *J Renin Angiotensin Aldosterone Syst* 2:81-83, 2001
420. Bivalacqua TJ, Champion HC, Hyman AL, McNamara DB, Kadowitz PJ. Analysis of responses to angiotensin II in the mouse. *J Renin Angiotensin Aldosterone Syst* 2:48-53, 2001
421. Shah MK, Kadowitz PJ. Cyclic adenosine monophosphate-dependent vascular responses to purinergic agonists adenosine triphosphate and uridine triphosphate in the anesthetized mouse. *J Cardiovasc Pharmacol* 39:142-149, 2002
424. Champion HC, Bivalacqua TJ, Zadina JE, Kastin AJ, Hyman AL, Kadowitz PJ. Role of nitric oxide in mediating vasodilator responses to opioid peptides in the rat. *Clin Exp Pharmacol Physiol* 29:229-232, 2002
425. Bivalacqua TJ, Champion HC, Lambert DG, Kadowitz PJ. Vasodilator responses to adenosine and hyperemia are mediated by A<sub>1</sub> and A<sub>2</sub> receptors in the cat vascular bed. *Am J Physiol Regul Integr Comp Physiol* 282:R1696-R1709, 2002
426. Bivalacqua TJ, Hellstrom WJ, Kadowitz PJ, Champion HC. Increased expression of arginase II in human diabetic corpus cavernosum: in diabetic-associated erectile dysfunction. *Int J Impot Res* 14:204, 2002
427. Ortiz LA, Champion HC, Lasky JA, Gambelli F, Gozal E, Hoyle GW, Beasley MB, Hyman AL, Friedman M, Kadowitz PJ. Enalapril protects mice from pulmonary hypertension by inhibiting TNF-mediated activation of NF-6B and AP-1. *Am J Physiol Lung Cell Mol Physiol* 282(6): L1209-1221, 2002

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 36

*Publications (cont'd):*

429. Das S, Maulik N, Das DK, Kadowitz PJ, Bivalacqua TJ. Cardioprotection with sildenafil, a selective inhibitor of cyclic 3',5'-monophosphate-specific phosphodiesterase 5. *Drugs Exp Clin Res* 28:213-219, 2002
430. Champion HC, Bivalacqua TJ, Pierce RL, Murphy WA, Coy DH, Hyman AL, Kadowitz PJ. Responses to human CGRP, ADM, and PAMP in human thymic arteries. *Am J Physiol Regul Integr Comp Physiol* 284:R531-R537, 2003
431. Bivalacqua TJ, Armstrong JS, Biggerstaff J, Abdel-Mageed AB, Kadowitz PJ, Hellstrom WJ, Champion HC. Gene transfer of extracellular SOD to the penis reduces O<sub>2</sub><sup>-</sup> and improve erectile function in aged rats. *Am J Physiol Heart Circ Physiol* 284:H1408-H1421, 2003
432. Pradhan L, Dabisch PA, Liles JT, Agrawal KC, Kadowitz PJ. Effect of acute intravenous cocaine administration on endothelium-dependent vasodepressor responses to acetylcholine. *J Cardiovasc Pharmacol Ther* 8:43-51, 2003
433. Bivalacqua TJ, Usta MF, Champion HC, Adams D, McNamara DB, Abdel-Mageed AB, Kadowitz PJ, Hellstrom WJ. Gene transfer of endothelial nitric oxide synthase partially restores nitric oxide synthesis and erectile function in streptozotocin diabetic rats. *J Urol* 169: 1911-1917, 2003
434. Baber SR, Champion HC, Bivalacqua TJ, Hyman AL, Kadowitz PJ. Role of cyclooxygenase-2 in the generation of vasoactive prostanoids in the rat pulmonary and systemic vascular beds. *Circulation* 108:896-901, 2003
435. Deng W, Jeter JR, Chattergoon NN, Bivalacqua TJ, Hyman AL, Kadowitz PJ. Adenoviral gene transfer of endothelial nitric oxide synthase: high level expression in ex vivo expanded marrow stromal cells. *Am J Physiol Cell Physiol* (Epub ahead of print), 2003
436. Bivalacqua TJ, Usta MF, Champion HC, Kadowitz PJ, Hellstrom WJ. Endothelial dysfunction in erectile dysfunction: role of the endothelium in erectile physiology and disease. *J Androl* 24:S17-S37, 2003
437. Dabisch PA, Liles JT, Kadowitz PJ. Effect of inhibition of nitric oxide synthase on the vasopressor response to ephedrine. *Can J Physiol Pharmacol* 81:966-971, 2003
438. Baber SR, Hyman AL, Kadowitz PJ. Role of COX-1 and -2 in prostanoid generation and modulation of angiotensin II responses. *Am J Physiol Heart Circ Physiol* 285:H2399-H2410, 2003
439. Dabisch PA, Liles JT, Taylor JT, Sears BW, Saenz R, Kadowitz PJ. Role of potassium channels in the nitric oxide-independent vasodilator response to acetylcholine. *Pharmacol Res* 49:207-215, 2004
440. Bivalacqua TJ, Usta MF, Champion HC, Leungwattanakij S, Dabisch PA, McNamara DB, Kadowitz PJ, Hellstrom WJ. Effect of combination endothelial nitric oxide synthase gene therapy and sildenafil on erectile function in diabetic rats. *Int J Impot Res* 16:22-29, 2004

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 37

*Publications (cont'd):*

441. Chattergoon NN, D'Souza FM, Deng W, Chen H, Hyman AL, Kadowitz PJ, Jeter JR Jr. The anti-proliferative effects of calcitonin gene-related peptide in aortic and pulmonary artery smooth muscle cells. *Am J Physiol Lung Cell Mol Physiol* (Epub ahead of print), 2004
442. Bivalacqua TJ, Champion HC, Usta MF, Cellek S, Chitaley K, Webb RC, Lewis RL, Mills TM, Hellstrom WJ, Kadowitz PJ. RhoA/Rho-kinase suppresses endothelial nitric oxide synthase in the penis a mechanism for diabetes-associated erectile dysfunction. *Proc Natl Acad Sci USA* 101:9121-9126, 2004
443. Bivalacqua TJ, Deng W, Champion HC, Hellstrom WJ, Kadowitz PJ. Gene therapy techniques for the delivery of endothelial nitric oxide synthase to the corpora cavernosal for erectile dysfunction. *Methods Mol Biol* 279:173-185, 2004
444. Dabisch PA, Kerut EK, Liles JT, Wien G, Smith M, Patterson M, McCoul ED, Sears BW, Saenz R, Kadowitz PJ. Responses to bradykinin are mediated by NO-independent mechanisms in the rat hindlimb vascular bed. *Pharmacol Res* 50:575-584, 2004
445. Nossaman BD, Dabisch PA, Liles JT, Baber SR, Champion HC, Kaye AD, Feng CJ, Anwar M, Bivalacqua TJ, Santiago JA, De Witt BJ, Kadowitz PJ. Peroxynitrite does not impair pulmonary and systemic vascular responses. *J Appl Physiol* 96:455-462, 2004
446. Deng W, Bivalacqua TJ, Chattergoon NN, Jeter JR Jr, Kadowitz PJ. Engineering ex vivo-expanded marrow stromal cells to secrete calcitonin gene-related peptide using adenoviral vector. *Stem Cells* 22:1279-1291, 2004

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 38

*Book Chapters:*

1. Kadowitz PJ, Sweet CS, Brody J. Effect of prostaglandins on adrenergic neurotransmission to vascular smooth muscle. In: *Prostaglandins in Cellular Biology and the Inflammatory Process*. Ramwell P (ed), New York: Plenum Press, 1972, pp 479-509
2. Kadowitz PJ, George WJ, Joiner PD, Hyman AL. Effects of prostaglandins E<sub>1</sub> and F<sub>2α</sub> on adrenergic responses in the pulmonary circulation. In: *Advances in the Biosciences*, Vol 9. Bergstrom B (ed), New York: Pergamon Press, 1973, pp 501-506
3. George WJ, Kadowitz PJ, Wilkerson RD. Role of cyclic GMP as the mediator of the negative inotropic effect of acetylcholine in the perfused rat heart. In: *Recent Advances in Studies on Cardiac Structure and Metabolism*, Vol 3. Dhalla NS (ed), Baltimore: University Park Press, 1973, pp 331-339
4. Kadowitz PJ, Yard AC, Greenberg S, Hyman AL. Influence of corticosteroids on cardiopulmonary responses to catecholamines. In: *Corticosteroids in the Treatment of Circulatory Shock*. Glenn TM (ed), Baltimore: University Park Press, 1974, pp 89-125
5. Hyman AL, Pennington DG, Kadowitz PJ, Jacques WE. Studies of the mechanisms of the pulmonary vasopressor response to endotoxin. In: *Corticosteroids in the Treatment of Circulatory Shock*. Glenn TM (ed), Baltimore: University Park Press, 1974, pp 129-149
6. Kadowitz PJ, Joiner PD, Hyman AL. The hypertensive effect of PGF<sub>2α</sub> on the pulmonary circulation of swine, lamb and dog. In: *Progress in Respiratory Research*, Vol 9. Herzog H (ed), Basel: Karger, 1975, pp 285-292
7. Kadowitz PJ, Joiner PD, Greenberg S, Hyman AL. Comparison of the effects of prostaglandins A, E, F and B on the canine pulmonary vascular bed. In: *Advances in Prostaglandin and Thromboxane Research*, Vol 1. Samuelsson B, Paoletti R (eds), New York: Raven Press, 1975, pp 403-415
8. Kadowitz PJ, Chapnick BM, Hyman AL, Brody MJ, Greenberg S. Influence of prostaglandins on the cardiovascular system. In: *Cardiovascular Pharmacology*. Antonaccio M (ed), New York: Raven Press, 1977, pp 167-184
9. Kadowitz PJ, Knight DS, Gruetter CA, Greenberg S, Hyman AL. Structure and function of the sympathetic nerves in the pulmonary vascular bed of the dog. In: *Microincubation*. Effros RM, Schmid-Schonbein H, Ditzel J (eds), Academic Press, 1981, pp 107-124
10. Kadowitz PJ, Lippton HL, McNamara DB, Spannhake EW, Hyman AL. Action and metabolism of prostaglandins in the pulmonary circulation. In: *Prostaglandins and the Cardiovascular System*. Oates JA (ed), New York: Raven Press, 1982, pp 333-357
11. Hyman AL, Spannhake EW, Kadowitz PJ. Pharmacology of the pulmonary circulation. In: *Progress in Cardiology*, Vol 11. Yu PN, Goodwin JF (eds), Philadelphia: Lea and Febiger, 1982, pp 107-130

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 39

*Book Chapters (cont'd):*

12. Kadowitz PJ, She HS, McNamara DB, Spannhake EW, Hyman AL. Prostaglandin transformation in the lung. In: *The Role of Chemical Mediators in the Pathophysiology of Acute Illness and Injury*. McConn R (ed), New York: Raven Press, 1982, pp 165-180
13. Kadowitz PJ, Hyman AL, Gruetter CA, Spannhake EW, Greenberg S. Differential actions of the prostaglandins on the pulmonary vascular bed. In: *Prostaglandins, Organ- and Tissue-Specific Actions*. Kadowitz PJ, Burks TF (eds), New York: Dekker, 1982, pp 237-253
14. Kadowitz PJ, Lippiton HL, McNamara DB, Wolin MS, Hyman AL. Cardiovascular actions of the prostaglandins. In: *Cardiovascular Pharmacology*, 2nd Ed. Antonaccio MJ (ed), New York: Raven Press, 1984, pp 453-474
15. Ignarro LJ, Gruetter CA, Hyman AL, Kadowitz PJ. Molecular mechanisms of vasodilatation. In: *Dopamine Receptor Agonists*. Poste G, Crooke ST (eds), New York: Plenum Publishing Corporation, 1984, pp 259-288
16. Kadowitz PJ, Hyman AL. Pulmonary vascular responses to nitrendipine. In: *Nitrendipine*. Scriabine R, Vanov S, Deck K (eds), Baltimore: Urban & Schwarzenberg, 1984, pp 361-363
17. Hyman AL, Lippiton HL, Ignarro LJ, Wood KS, McNamara DB, Kadowitz PJ. Analysis of autonomic responses in the pulmonary vascular bed. In: *The Pulmonary Circulation and Acute Lung Injury*. Said SI (ed), New York: Futura Publishing Co, Inc, 1985, pp 61-99
18. Kadowitz PJ, Hyman AL. Leukotrienes, the pulmonary circulation. In: *The Pulmonary Circulation and Pulmonary Vascular Injury*. Said SI (ed), New York: Futura Publishing Co, Inc, 1985, pp 123-134
19. Kadowitz PJ, McNamara DB, Grazer JM, Hyman AL. Pulmonary vascular responses to leukotriene D<sub>4</sub> are species dependent. In: *Acute Lung Injury*. Kazemi H (ed), Boston: P.S.G. Publishing Co, Inc, 1986, pp 223-246
20. Kadowitz PJ, Hyman AL. Comparative responses to leukotriene D<sub>4</sub> in the sheep and cat. In: *Prostaglandins and Thromboxane Research*. Bailey JM (ed), New York: Raven Press, 1986, pp 2-23
21. Hyman AL, Lippiton HL, Ignarro LJ, McNamara DB, Wood KS, Kadowitz PJ. Autonomic mechanisms in the pulmonary vascular bed. In: *Acute Lung Injury*. Kazemi H (ed), Littleton: P.S.G. Publishing Co, Inc, 1986, pp 171-200
22. Lippiton HL, McNamara DB, Armstead WM, Hyman AL, Kadowitz PJ. Cardiovascular actions of arachidonic acid metabolites. In: *Handbook of Biology and Chemistry of Prostaglandins and Related Metabolites of Polyunsaturated Fatty Acids*. Curtis-Prior PB (ed), New York: Churchill Livingstone Press, 1988
23. Kadowitz PJ, Cassin S, McNamara DB, Minkes RK. Endothelial factors in the control of the pulmonary circulation. In: *Cardiovascular Significance of Endothelium Derived Factors*. Rubanyi GM (ed), 1992

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 40

*Book Chapters (cont'd):*

24. Kadowitz PJ, Cassin S, McNamara DB, Minkes RK. Endothelial control of the pulmonary circulation. In: *Cardiovascular Significance of Endothelium-Derived Vasoactive Factors*. New York: Mount Kisco, 1991, pp 147-177
25. Kaye AD, Nossaman BD, Kadowitz PJ. Intravenous anesthetics in the pulmonary circulation. In: *Nitric Oxide and the Regulation of the Peripheral Circulation. 1. Nitric Oxide in Biology & Medicine*. Kadowitz PJ, McNamara DB (eds), pp 131-147, Boston:Birkhäuser, 2000
26. Nossaman BD, Kaye AD, Kadowitz PJ. Nitric oxide and the pulmonary circulation in the adult. In: *Nitric Oxide and the Regulation of the Peripheral Circulation. 1. Nitric Oxide in Biology & Medicine*. Kadowitz PJ, McNamara DB (eds), pp 197-224, Boston:Birkhäuser, 2000
27. Champion HC, Kadowitz PJ. Role of nitric oxide in the skeletal muscle vascular bed. In: *Nitric Oxide and the Regulation of the Peripheral Circulation. 1. Nitric Oxide in Biology & Medicine*. Kadowitz PJ, McNamara DB (eds), pp 227-240, Boston:Birkhäuser, 2000
28. Bivalacqua TJ, Champion HC, Kadowitz PJ, Hellstrom WJG. NO effect on penile blood flow and lower genitourinary tract function. In: *Nitric Oxide and the Regulation of the Peripheral Circulation. 1. Nitric Oxide in Biology & Medicine*. Kadowitz PJ, McNamara DB (eds), pp 286-302, Boston:Birkhäuser, 2000

Curriculum Vitae

Philip J. Kadowitz, Ph.D.

Page 41

*Symposia:*

1. McNamara DB, Kerstein MD, Landry AZ, Hussey JL, Lipton HL, Rosenson RS, Hyman AL, Kadowitz PJ. Coronary arterial prostacyclin synthase and PGE<sub>2</sub> isomerase activities. In: *IV International Washington Spring Symposium: Prostaglandins and Leukotrienes '84*. Bailey JM (ed), 1985
2. McNamara DB, Landry AZ, Kerstein MD, Ignarro LJ, Hussey JL, Lipton HL, Rosenson RS, Hyman AL, Kadowitz PJ. Modulation of coronary arterial prostacyclin synthetase. In: *International Symposium on Stress and Heart Disease*. Dhalla NS (ed), Boston: Martinus Nijhoff Publ, 1985, pp 342-352
3. McNamara DB, Rush DS, Kerstein MD, Bellan JA, Mayeux PR, Adinolfi MF, Hyman AL, Kadowitz PJ. Prostaglandin endoperoxide metabolism by the human carotid artery. In: *International Symposium on Stress and Heart Disease*. Dhalla NS (ed), Boston: Martinus Nijhoff Publ, 1985, pp 333-341
4. Champion HC, Lambert DG, Czapla MA, Bivalacqua TJ, McNamara DB, Kadowitz PJ. Pharmacological comparison of angiotensin receptor antagonists in the peripheral vasculature. In: *Angiotensin II Receptor Blockade: Physiological and Clinical Implications*. Dhalla NS, Zahradka P, Dixon IMC, Beamish RE (eds), Boston: Kluwer Academic Publishers, Inc (in press), 1998
5. Champion HC, Murphy WA, Coy DH, Kadowitz PJ. Cardiovascular aspects of adrenomedullin and related peptides in the cat and rat. In: *Adrenomedullin Symposium: An International Forum*. Martinez A (Ed), Boston: Kluwer Academic Publishers, Inc (in press), 1998
6. Champion HC, Murphy WA, Coy DH, McNamara DB, Kadowitz PJ. Analysis of cardiovascular actions of proadrenomedullin NH<sub>2</sub>-terminal 20 peptide (PAMP) in the rat and cat. In: *Adrenomedullin Symposium: An International Forum*. Martinez A (Ed), Boston: Kluwer Academic Publishers, Inc (in press), 1998
7. Nossaman BD, Kaye AD, Champion HC, Kadowitz PJ. Analysis of responses to adrenomedullin and related peptides in the pulmonary vascular bed. In: *Adrenomedullin Symposium: An International Forum*. Martinez A (Ed), Boston: Kluwer Academic Publishers, Inc (in press), 1998

**Curriculum Vitae**  
Philip J. Kadowitz, Ph.D.  
Page 42

*Graduate Students:*

Michael Goldberg	1975 (Ph.D.)
Carl Gruetter	1978 (Ph.D.)
Elisa Klainer	1978 (M.S.)
Steven Napoli	1979 (M.S.)
James Levin	1981 (M.S.)
Theo Mellion	1982 (Ph.D.)
William Armstead	1983 (M.S.)
	1985 (Ph.D.)
David Underwood	1987 (Ph.D.)
Keith Lepak	1989 (M.S.)
Robert Minkes	1990 (Ph.D.)
LeeAnn MacMillan	1990 (M.S.)
Timothy McMahon	1992 (Ph.D.)
Douglas Tamura	1993 (M.S.)
Tim Lian	1993 (M.S.)
Suzette Y. Osei	1993 (Ph.D.)
Jose A. Santiago	1995 (Ph.D.)
Bracken J. DeWitt	1996 (Ph.D.)
Etoi A. Garrison	1995 (Ph.D.)
Hunter C. Champion	1999 (Ph.D.)

*Fellows:*

Barry Chapnick, Ph.D.
William Spannhake, Ph.D.
Dennis McNamara, Ph.D.
Prim Nandiwada, Ph.D.
David Knight, Ph.D.
Julia Harrington, M.D.
Kimberly Cowen, M.D.
Tony Kriseman, M.D.
Samuel Tilden, M.D.
Maynard Dyson, M.D.
James Hood, M.D.
Victoria Boyd, Ph.D.
David Y. Cheng, Ph.D.

*Grant Support:*

NHLI, Medical Students Short-Term Training Grant; \$30,000/year, \$250,000 total award  
NIH HL11802, "Cardiovascular Surgical Research;" Albert L. Hyman, M.D., P/I; 07/01/86-  
06/30/91; \$958,400 total award; 20% effort  
NIH, "Calcium Antagonists and Vasoconstrictor Function;" Philip J. Kadowitz, Ph.D., P/I; to  
be reviewed Oct/Nov, 1987; \$434,970 total amount requested; 25% effort  
NIH, "Humoral Control of Pulmonary and Systemic Circulation;" Philip J. Kadowitz, Ph.D.,  
P/I; reviewed June, 1987; \$670,416 total amount requested; 40% effort  
American Heart Association, "Thromboxane Responses in the Pulmonary Vascular Bed;"  
Philip J. Kadowitz, P/I; 1986-87; \$30,000  
National Institutes of Health No. RO1 HL15580 entitled "Humoral Control of Pulmonary and  
Systemic Circulation;" Philip J. Kadowitz, Principal Investigator; 09/01/88 to 08/31/93;  
\$630,000  
American Heart Association No. 91007110 entitled "Analysis of Pulmonary Vascular  
Responses to Endothelin;" Philip J. Kadowitz, Principal Investigator; 07/01/91 to  
06/30/94; \$120,000  
National Institutes of Health RO1 HL6200 entitled "Cardiopulmonary Surgery Research;"  
Albert L. Hyman, Principal Investigator; 07/01/00-06/30/03; \$200,000  
American Heart Association Southeast Affiliate, "Effect of Adenoviral-mediated Gene  
Transfer in the Pulmonary Vascular Bed of the Mouse," 7/1/00-6/30/02, \$120,000