

## CURRICULUM VITAE

### Hitoshi YOKOYAMA, MD, PhD

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#### PROFESSIONAL APPOINTMENT:

2012.4-2014.3 Executive Director, Fukushima Medical University  
2006.4-2012.3 Deputy Director, Fukushima Medical University Hospital  
2001.1- Present Professor and Chairman  
Dept. of Cardiovascular Surgery  
Fukushima Medical University  
1996.8-2000.12 Associate Professor  
Dept. of Thoracic & Cardiovascular Surgery  
Tohoku University School of Medicine, Sendai, Japan  
1994.8-96.7 Research Associate (supported by Uehara Memorial Research Foundation,  
Japan), Dept. of Cardiothoracic Surgery, Medical Collage of Pennsylvania &  
Hahnemann University, Philadelphia, USA  
1994.7-96.7 Assistant Professor  
Dept. of Thoracic & Cardiovascular Surgery, Tohoku University School of  
Medicine, Sendai, Japan  
1992.6-94.6 Staff Surgeon  
Dept. of Cardiovascular Surgery, Aomori General Hospital, Aomori, Japan  
1991.4-92.5 Clinical Fellow  
Dept. of Thoracic & Cardiovascular Surgery, Tohoku University Hospital,  
Sendai, Japan  
1983.4-87.3 Resident  
Division of Cardiothoracic Surgery & Anesthesiology, Department of Surgery,  
Mito National Hospital, Mito, Japan

#### CERTIFICATION:

1992.4 Japanese Board of Cardiothoracic Surgery  
1989.4 Japanese Board of Surgery  
1987.2 Japanese Board of Anesthesiology

#### MEMBERSHIP:

Japanese Society for Cardiovascular Surgery (Board member 2008-, Secretary  
General 2013-, President 2018-)  
Japanese Association for Thoracic Surgery  
Japanese Circulation Society (Board member 2014-)  
Japan Surgical Society  
American Heart Association (Fellow)  
International Society for Minimally Invasive Cardiothoracic Surgery  
European Association for Cardiothoracic Surgery  
Society of Thoracic Surgery  
American Association of Thoracic Surgery

#### JOURNAL:

*Journal of Japanese Society for Cardiovascular Surgery* : Editor in Chief  
*Circulation Journal*: Associate editor  
*Gen Thorac Cardiovasc Surg*: Associate editor-in-chief (2013-14)

**EDUCATION:**

1987.4-91.3 Tohoku University Graduate School of Medicine  
1977.4-83.3 Tohoku University School of Medicine

**CLINICAL INTEREST:**

Off-pump coronary artery bypass  
Mitral valve surgery  
Aortic surgery

**RESEARCH INTEREST:**

Cardiovascular Pharmacology  
Heart Transplantation  
Cardiac ischemia-reperfusion injury  
Stem-cell transplantaion for ischemic heart disease  
Three-dimensional analysis of coronary artery motion

**SELECTED PUBLICATONS:**

1. Irie Y, Kondo S, Rokkaku K, Tsuboi E, Takano H, Yokoyama H. Obturator foramen bypass for infective groin caused by closure device. Asian Cardiovasc Thorac Ann. 2016, [Epub ahead of print]
2. Ishida K, Satokawa H, Takase S, Kagoshima A, Takano T, and Yokoyama H. Video-assisted endoscopic resection of left ventricular papillary fibroelastoma through the aortic valve. Asian J Endosc Surg. 2016, [Epub ahead of print]
3. Katada Y, Kondo S, Tsuboi E, Rokkaku K, Irie Y, Yokoyama H. Endovascular total arch repair using in situ fenestration for arch aneurysm and chronic Type A dissection. Ann Thorac Surg. 101(2), 625-630, 2016.
4. Sato Y, Satokawa H, Yamamoto A, Yokoyama H, Maehara K. Giant right atrial diverticulum with thrombosis formation. Asian Cardiovasc Thorac Ann. 23 (3), 314-316, 2015.
5. Kurosawa H, Seto Y, Wakamatsu H, Sato Y, Takase S, Omata S, Yokoyama H. Effects of phenylephrine and noradrenaline on coronary artery motion in an open-chest porcine beating heart model. Surgery Today. 44 (6), 1128-1137, 2014.
6. Satokawa H, Takase S, Seto Y, Yokoyama H, Gotoh M, Kogure M, Midorikawa H, Saito T, Maehara K. Management strategy of isolated spontaneous dissection of the superior mesenteric artery. Ann Vasc Dis. 7(3), 2014.
7. Igarashi T, Takahashi S, Takase S, Yokoyama H. Intraoperative thrombectomy for occluded carotid arteries in patients with acute aortic dissection: report of two cases. Surg Today. 44(6), 1177-9, 2014.

8. Igarashi T, Takase S, Satokawa H, Wakamatsu H, Kurosawa H, Yokoyama H. Left ventricular noncompaction complicated by mitral valve prolapse: Report of a case. *Surg Today*. 43, 818-820, 2013.
9. Igarashi T, Takase S, Satokawa H, Misawa Y, Wakamatsu H, Sato Y, Kukosawa H, Seto Y, Tsuboi E, Yokoyama H. Open-stent grafting with a GORE TAG Thoracic Endoprosthesis for an extended severely atheromatous thoracic aortic aneurysm: Report of a case. *Surgery Today*. 43(1), 103-105, 2013.
10. Igarashi T, Takase S, Satokawa H, Misawa Y, Wakamatsu H, Yokoyama H. Thoracic endovascular aortic repair with visceral arteries intermittent clamp technique for descending thoracic aortic aneurysm with shaggy aorta. *Ann Vasc Surg*. 27(7), 974.e11-974.e14, 2013.
11. Satokawa H, Seto Y, Yamamoto A, Yokoyama H, Kogure M, Ohtani S, Gotoh M. A case report of aneurysmectomy after thrombo-intimectomy for spontaneous isolated superior mesenteric artery dissection. *Ann Vasc Dis*. 15(2), 204-207, 2012.
12. Seto Y, Yokoyama H, Takase S, Tanji M, Takahashi K, Takahashi S, Kondo S, Hagiwara K, Watanabe M. The results of the enclose II proximal anastomotic device in 178 off-pump coronary artery bypass surgeries. *Innovations* 7(4), 242-246, 2012.
13. Wakamatsu H, Watanabe T, Sato Y, Takase S, Omata S, Yokoyama H. Landiolol reduces coronary artery motion in an open chest porcine model: Implication for off-pump coronary artery bypass surgery. *Surg Today* 42:205-208, 2012.
14. Wakamatsu H, Watanabe T, Sato Y, Takase S, Omata S, Yokoyama H. Selective beta-1 receptor blockade further reduces the mechanically stabilized target coronary artery motion during beating heart surgery. *Innovations*. 5, 349-354, 2010.
15. Satokawa H, Yokoyama H, Wakamatsu H, and Igarashi T. Comparison of endovenous laser treatment for varicose veins with high ligation using pulse mode and without high ligation using continuous mode and lower energy. *Ann Vasc Dis*. 3(1), 46-51, 2010.
16. Takase S, Wakamatsu H, Yokoyama H. Short- and long-term outcome of the octogenarians after off-pump coronary artery bypass surgery. *Gen Thorac Cardiovasc Surg*. 58:561-567, 2010.

17. Wakamatsu H, Sato Y, Takase S, Sato Y, Satokawa H, Yokoyama H. Aortic arch repair with coronary artery revascularization. *Fukushima J Med Sci*. 55, 52-60, 2009.
18. Saito T, Tsuchiya T, Kenjo A, Kimura T, Sato Y, Saito T, Anazawa T, Takase S, Satokawa H, Satoh Y, Yokoyama H, Ohira H, Rai T, Gotoh M. Successful treatment of pseudoaneurysms of celiac and superior mesenteric arteries by combined endovascular and surgical approach. *J Hepatobil Panc Surg*. 15 (4), 444-448, 2008.
19. Sato Y, Satokawa H, Takase S, Misawa Y, Yokoyama H. Prolapse of aortic intimal flap into the left ventricle – A rare cause of global myocardial ischemia in acute type A aortic dissection. *Circ J*. 70(2), 214-215, 2006.
20. Watanabe T, Omata S, Odamura M, Okada M, Nakamura Y, Yokoyama H. Three-dimensional quantification of cardiac surface motion: A newly developed three-dimensional digital motion-capture and reconstruction system for beating heart surgery. *J Thorac Cardiovasc Surg*. 132, 1162-71, 2006.
21. Midorikawa H, Ogawa T, Satou K, Hoshino S, Takase S, Yokoyama H. Long-term results of endoluminal grafting for descending thoracic aortic aneurysm. *Jpn J Thorac Cardiovasc Surg*. 53, 295-301, 2005.
22. Izuha H, Hattori M, Igari T, Wakamatsu H, Watanabe T, Yokoyama H. Changes in platelet aggregation during cardiopulmonary bypass: comparison of poly-2-methoxyethylacrylate and heparin as a circuit coating material. *Artif Organs*. 8, 41-46, 2005.
23. Yaoita H, Takase S, Maruyama Y, Sato Y, Satokawa H, Hoshi N, Ono N, Igari T, Ohto H, Yokoyama H. Scintigraphic assessment of the effects of bone marrow-derived mononuclear cell transplantation combined with off-pump coronary artery bypass surgery in patients with ischemic heart disease. *J Nucl Med*. 46(10), 1610-7, 2005.
24. Yokoyama H, Sato Y, Takase S, Takahashi K, Wakamatsu H, Sato Y. Introduction of off-pump coronary artery bypass into aortic arch repair: A new solution for the surgical treatment of multiorgan arteriosclerosis. *J Thorac Cardiovasc Surg*. 129, 935-6, 2005.
25. Sato Y, Yokoyama H, Watanabe M, and Hamada O. A surgical case of aortic valve replacement in patient with chronic idiopathic thrombocytopenic purpura. *Fukushima J Med Sci*. 50(1), 29-35, 2004.

26. Ando M, Igari T, Ando S, Satokawa H, Yokoyama H. Repair of the aortico-left ventricular tunnel original from the right aortic sinus with severe aortic valve regurgitation. *Annals of thoracic and cardiovascular surgery*. 10(1), 47- 50, 2004.
27. Yokoyama H, Takase S, Misawa Y, Takahashi K, Sato Y, Satokawa H. A simple technique of introducing intracoronary shunts for off-pump coronary artery bypass surgery. *Ann Thorac Surg*. 78, 352-355, 2004.
28. Satokawa H, Takahasi K, Hoshino Y, Yokoyama H, Saito T, Kazuma H. Tuberculous pseudoaneurysm of the celiac artery. A case report. *Int Angiol*. 23(1), 85-8, 2004.
29. Sato Y, Yokoyama H, Watanabe M, Hamada O. A surgical of combined valvular disease complicated by absent right superior vena and persistent left superior vena cava. *Ann Thorac Cardiovasc Surg*. 9(6), 2003.
30. Ando M, Igari T, Yokoyama H. CT features of chronic contained rupture of an abdominal aortic aneurysm. *Ann Thorac Cardiovasc Surg*. 9(4), 274-278, 2003.
31. Sato Y, Yokoyama H, Satokawa H, Takase S, Maruyama Y. A report of a surgical case of papillary fibroelastoma in the left ventricular outflow tract. *Ann Thorac and Cardiovasc Surg*. 9(4), 270-273, 2003.
32. Yokoyama H. Aortic arch aneurysm complicated with coronary artery disease: Still a surgical challenge? *Ann Thorac Cardiovasc Surg*. 8(2), 62-8, 2002.
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35. Tabayashi K, Yokoyama H, Iguchi A, Watanabe S, Fukujyu T, Tsuru Y, Niibori K, Akimoto H, Tofukuji M. Concomitant replacement of the aortic root and aortic arch with or without secondary thoracoabdominal aorta replacement. *Jpn J Thorac Cardiovasc Surg*. 49, 42-46, 2001.

36. Iguchi A, Tsuru Y, Yokoyama H, Tabayashi K. Open surgical repair for a perigraft leak after endovascular stent-graft emplacement of descending thoracic aorta. *Jpn J Thorac Cardiovasc Surg.* 49,618-620, 2001.
37. Akimoto H, Tsuru Y, Yokoyama H, Sadahiro M, Tabayashi K. Commissure holder: An innovative device for aortic valve-sparing technique *Ann Thorac Surg.* 71, 1380-1381, 2001.
38. Fukuchi M, Watanabe J, Kumagai K, Katori Y, Baba S, Fukuda K, Yagi T, Iguchi A, Yokoyama H, Miura M, Kagaya Y, Sato S, Tabayashi K, Shirato K. Increased von Willbrand factor in the endocardium as a local predisposing factor for thrombogenesis in overload human atrial appendage. *J Am Coll Cardiol.* 37, 1436-42, 2001.
39. Yokoyama H, Ohmi M, Sadahiro M, Shoji Y, Moizumi Y, Tabayashi K. Spontaneous rupture of the thoracic aorta. *Ann Thorac Surg.* 70, 683-689, 2000.
40. Sato K, Iguchi A, Tanaka Y, Hata M, Sadahiro M, Yokoyama H, Ohmi M, Tabayashi K. Pedicled pericardial flap for pulmonary artery in adult dogs. *Jpn J Thorac Cardiovasc Surg.* 48, 211-216, 2000.
41. Sakurai M, Fukuyama N, Iguchi A, Akimoto H, Ohmi M, Yokoyama H, Nakazawa H, Tabayashi K. Quantitative analysis of cardiac 3-L-nitrotyrosine during acute allograft rejection in an experimental heart transplantation. *Transplantation.* 68, 1818-1822, 1999.
42. Mohhiudin M, Yokoyama H, Reiss R, DiSesa VJ. Induction of tolerance to "untolerated strain" by double strain thymic inoculation in experimental rat cardiac transplantation. *Transplant Proc.* 31, 1-2, 1999.
43. Niibori K, Wroblewski KP, Yokoyama H, Crestanello JA, Whitman GJR. Bioenergetic effect of liposomal coenzyme Q10 on myocardial ischemia reperfusion injury. *BioFactors.* 9, 307-313, 1999.
44. Yokoyama H, Sadahiro M, Iguchi A, Ohmi M, Tanaka S, Tabayashi K. Remnant omental transfer for the mediastinitis after coronary revascularization with right gastro-epiploic artery. *Ann Thorac Surg.* 68, 269-271, 1999.
45. Ohmi M, Tabayashi K, Hata M, Yokoyama H, Sadahiro M, Saito H. Brain damage after aortic arch repair using selective cerebral perfusion *Ann Thorac Surg.* 66, 1250-1253, 1998.

46. Niibori K, Wroblewski KP, Yokoyama H, Crestanello JA, Whitman GJR. Bioenergetic effect of acute administration of liposomal coenzyme Q10 on myocardial ischemia reperfusion injury. *Surgical Forum*. 49, 237-238, 1998.
47. Niibori K, Yokoyama H, Crestanello JA, Whitman GJ. Acute administration of liposomal Coenzyme Q10 increases myocardial tissue levels and improves tolerance to ischemia reperfusion injury. *J Surg Res*, 79, 141-145, 1998.
48. Whitman GJR, Niibori K, Yokoyama H, Crestanello JA, Lingle DM, Momeni R. The mechanism of coenzyme Q10 as therapy for myocardial ischemia reperfusion injury. *Molec Aspects Med*. 18, 195-203, 1997.
49. Shen Z, Mohiuddin M, Yokoyama H, Reiss R, DiSesa VJ. Induction of tolerance to an experimental cardiac allograft through intrathymic inoculation of class II major histocompatibility disparate antigens. *J Thorac Cardiovasc Surg*. 112, 1315-1318, 1996.
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51. Yokoyama H, Momeni R, Goldstein C, Mohiuddin M, Shen Z, Fyfe B, Whitmann G, DiSesa VJ. Effect of vesnarinone, a novel orally active inotropic agent with an immunosuppressive action, on experimental cardiac transplantation in rats. *Transplantation*. 62, 1540-1543, 1996.
52. Yokoyama H, Lingle DM, Crestanello JA, Kamelgard J, Kott BR, Momeni R, Millili J, Mortensen SA, Whitman GJ. CoQ10 protects coronary endothelial function from ischemia reperfusion injury via an antioxidant effect. *Surgery*. 120, 189-196, 1996.
53. Shen Z, Mohiuddin M, Goldstein C, Yokoyama H, DiSesa VJ. Durability of donor-specific and organ-specific heart transplant tolerance induced by intrathymic pretreatment with allogeneic spleen cells. *J Thorac Cardiovasc Surg*. 111(2), 429-423, 1996.
54. Mohiuddin M, Shen Z, Yokoyama H, Goldstein C, DiSesa VJ. Improved experimental cardiac xenograft survival with cyclophosphamide and intrathymic donor cells. *Xenotransplantation*. 3, 260-263, 1996.

55. Mohiuddin M, Shen Z, Goldstein C, Yokoyama H, DiSesa VJ. The molecular immunology of transplantation: Monoclonal antibody to a specific T-cell receptor chain prolongs experimental heart graft survival. *Surgical Forum*. 47, 35-37, 1996.
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57. Yokoyama H, Momeni R, Kott B, Crestanello JA, Whitman GJ. Improved coronary vasodilatory function after ischemia reperfusion by lyposomal coenzyme Q10; Comparison with other antioxidant agents *Surgical Forum*.47, 237-238, 1996.
58. Mohiuddin M, Shen Z, Goldstein C, Yokoyama H, DiSesa VJ. Experimental cardiac xenografting with irradiation and intrathymic and intravenous xenogeneic cells. *Transplant Proc*. 28, 673, 1996.
59. Shen Z, Mohiuddin M, Goldstein C, Yokoyama H, DiSesa VJ. Tolerance to experimental cardiac allografts but not xenografts is induced after simultaneous neonatal intrathymic inoculation with allo-and xenogeneic cells. *Transplant Proc*. 28, 719-720, 1996.
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61. Yokoyama H, Goldstein CD, Shen Z, Mohiuddin M, DiSesa VJ. The effects of double strain intrathymic inoculation on tolerance induction to experimental cardiac allografts. *Surg Forum*. 46, 244-246, 1995.
62. Yokoyama H, Ohmi M, Murata S, Nakame T, Tabayashi K, Mohri H. Proposal of working left heart model with a heterotopic transplantation technique in rats. *J Heart Lung Transplant*. 14, 706-712, 1995.
63. Yokoyama H, Haneda K, Satoh N, Ohmi M, Miura M, Satoh K, Mohri H. Early and late results after correction of ventricular septal defect with Down syndrome. *Asian Cardiovasc Thorac Ann*. 3, 23-25, 1995.
64. Yokoyama H, Tanaka S. Simple arterial graft holder for coronary artery bypass grafting. *Ann Thorac Surg*. 59, 33-34, 1995.

65. Tabayashi K, Ohmi M, Togo T, Miura M, Yokoyama H, Akimoto H, Murata S, Ohsaka K, Mohri H. Aortic arch aneurysm repair using selective cerebral perfusion. *Ann Thorac Surg.* 57, 1305-1310, 1994.
66. Yokoyama H, Maida K, Takahashi S, Tanaka S. Purulently infected abdominal aortic aneurysm: In situ reconstruction with trans-mesocolic omental transposition technique. *J Cardiovasc Surg.* 2, 78-80, 1994.
67. Yokoyama H, Togo T, Murata M, Osaka K, Tabayashi K, Mohri H. Cardiac over-dilatation after cardiopulmonary bypass: Ceramic plate technique for sternal splinting. *Ann Thorac Surg.* 56, 971-972, 1993.
68. Yokoyama H, Ohmi M, Iguchi A, Nakame T, Murata S, Tabayashi K, Mohri H. Changes in myocardial beta-adrenergic receptors during acute rejection of heterotopically transplanted rat hearts. *J Thorac Cardiovasc Surg.* 104, 1567-1571, 1992.
69. Ohmi M, Yokoyama H, Nakame T, Murata S, Akimoto H, Tabayashi K, Mohri H. Hemodynamic performance in a heterotopically transplanted dog heart: oposal of techniques for working left heart model of heretotopic (abdominal) heart transplantation. *J Heart Lung Transplant.* 11, 1147-1150, 1992.
70. Yokoyama H, Ishii K, Yanagisawa T, Taira N. An explanation of bell shaped dose-positive inotropic effect for denopamine in canine right ventricular muscle. *J Cardiovasc Pharmacol.* 14, 570-576, 1989.
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#### BOOK CHAPTERS

1. Yokoyama H. Indication and safe strategy : Off-Pump Coronary Artery Bypass. Springer Japan, Tokyo, 39-44, 2016.

2. Yokoyama H. Stabilization : Off-pump Coronary Artery Bypass, Springer Japan, Tokyo, 75-86, 2016.
3. Yanagisawa T, Ishii K, Yokoyama H, Kurosawa H, Taira N. Selective stimulation of high-affinity beta1-receptors: Its implication in the treatment of mild heart failure. Recent Progress in Failing Heart Syndrome. Springer-Verlag, Tokyo, 281-302,1991,