

DANIEL C. LEE, M.D.

CURRICULUM VITAE

OFFICE ADDRESS

Division of Cardiothoracic Surgery
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CITIZENSHIP

U.S.A.

EDUCATION

DEGREE

1989-1993	University of California at San Diego	Major: Bioengineering	B.S., June, 1993
1993-1997	University of Chicago Pritzker School of Medicine		M.D., June, 1997

POSTDOCTORAL TRAINING

1997-1999	Loyola University of Chicago Medical Center	General Surgery Residency
1999-2002	Columbia University College of Physicians and Surgeons New York Presbyterian Hospital	NIH Fellowship
2002-2005	Yale University School of Medicine Yale-New Haven Hospital	General Surgery Residency
2005	Memorial Sloan-Kettering Cancer Center	Thoracic Surgery Fellowship
2005-2008	Weill Medical College of Cornell University New York Presbyterian Hospital	Cardiothoracic Surgery Residency

ACADEMIC APPOINTMENTS

2008-	Assistant Professor of Surgery State University of New York Downstate Medical Center
2008-	Faculty Member School of Graduate Studies State University of New York Downstate Medical Center

HOSPITAL APPOINTMENTS

2008-	Attending Cardiothoracic Surgeon State University of New York Downstate Medical Center
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LICENSURE

2000	New York (#218996)
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BOARD CERTIFICATION

2006 American Board of Surgery (#51580)

PROFESSIONAL MEMBERSHIP

New York Society for Thoracic Surgery

Yale Surgical Society

HONORS AND AWARDS

1992 Golden Key National Honor Society

1992 UCSD Research Scholar Award

1993 *Phi Beta Kappa*

1993 *Magna Cum Laude* Graduate

1994 NIH Student Research Fellowship Award

1995-1996 Lifeline Foundation of the Society for Vascular Surgery and International Society for Cardiovascular Surgery Student Research Fellowship Award

2000-2001 Columbia University Surgical Research Grant

2001-2002 Columbia University Surgical Research Grant

1999-2002 NIH/National Heart, Lung, and Blood Institute Individual NRSA Fellowship Grant (# 1 F32 HL10191-01)

2002 Inglenook Oncology Young Investigator Award, American Association for Cancer Research

RESEARCH EXPERIENCE

- 1991-1993 University of California, Department of Applied Mechanics and Engineering Sciences, Dr. A. D. McCulloch; Residual stress in the myocardium
- 1993-1996 University of Chicago, Department of Surgery, Dr. H. S. Bassiouny; Heart rate variability and experimental atherogenesis
- 1999-2002 Columbia University, Department of Surgery, Dr. M. C. Oz, and Department of Anesthesia, Dr. E. Bennett-Guerrero; Antioxidants and high risk cardiac surgery
- 1999-2002 Columbia University, Department of Surgery, Dr. M. C. Oz and Dr. W. Ting; Clinical implications of the New York Cardiac Surgery Registry
- 1999-2002 Columbia University, Department of Surgery, Dr. M. C. Oz, and Department of Biomedical Engineering, Dr. E. F. Leonard; Visualization through blood
- 1999-2002 Columbia University, Department of Surgery, Dr. D. M. Stern and Dr. A. M. Schmidt; Receptor for advanced glycation end products and tumor biology
- 2001-2002 Columbia University, Department of Surgery, Dr. J. J. Kandel and Dr. A. M. Schmidt; Angiogenesis and tumor biology
- 2007- State University of New York-Downstate Medical Center, Dr. W. Ko and Dr. M. Zhang; Ischemia reperfusion and autoimmune response
- 2007- State University of New York-Downstate Medical Center, Dr. W. Ko and Dr. R. Barbour; Optical tomography in cardiac surgery

RESEARCH SUPPORT

DATE	SOURCE	AMOUNT	ROLE
1994	NIH Student Research Fellowship	\$3,000	PI
1995-1996	Lifeline Foundation	\$3,000	PI
2000-2001	Columbia University	\$5,000	PI
2001-2002	Columbia University	\$6,000	PI
1999-2002	NIH Individual NRSA Grant (# 1 F32 HL10191-01)	\$120,000	PI

PUBLICATIONS

Bassiouny, H.S., Lee, D.C., Zarins, C.K., Glagov, S., "Low Diurnal Heart Rate Variability Inhibits Experimental Carotid Stenosis." *Surgical Forum* 46, 1995.

Lee, D.C., Ting, W. "Tissue versus Metal Valves: Weighing the Factors." *Healthology.com Cardio Health* 234, 2000.

Lee, D.C., Oz, M.C., Lin, S.X., Weinberg, A.D., Ting, W. "Quality of Care and Outcome in Coronary Revascularization: Are There any Differences between Mandatory and Voluntary Reporting?" *Surgical Forum* 51, 523-524, 2000.

Taguchi, A., Blood, D.C., Del Toro, G., Canet, A., Lee, D.C., Qu, W., Tanji, N., Lu, Y., Lalla, E., Fu, C., Hofmann, M.A., Kislinger, T., Ingram, M., Lu, A., Tanaka, K., Hori, O., Ogawa, S., Stern, D.M., Schmidt, A.M. "Blockade of RAGE – amphoterin signalling suppresses tumour growth and metastases." *Nature* 405:354-360, 2000.

- Comment in: *Nature* 405:287-288, 2000.

Lee, D.C., Oz, M.C., Weinberg, A.D., Lin, S.X., Ting, W. "Optimal Timing of Revascularization: Transmural Versus Nontransmural Acute Myocardial Infarction." *Annals of Thoracic Surgery* 71:1198-204, 2001.

Lee, D.C., Qu, W, Lu, Y., Stern, D.M., Schmidt, A.M. "Blockade of RAGE Suppresses Growth, Metastases, and Progression of Mammary Tumors in a Murine Model of Breast Cancer." *Surgical Forum* 52, 274-276, 2001.

Grimblatov, V., Lee, D.C., Oz, M., Leonard, E.F. "Spectral Analysis of Optical Imaging Through Blood." *Lasers in Surgery: Advanced Characterization, Therapeutics, and Systems XII*, Bass, L.S., Kollias, N., Malek, R.S., Katzir, A., Bartels, K.E. Tate, L.P., Peavy, G.M., Lucroy, M.D., Shaw, U.K., Wong, B.J., Trowers, E.A., Woodward, T.A., de Riese, W.T., Gregory, K.W., Editors, *Proceedings of the International Society for Photo-optical Engineering* 4609:438-48. 2002.

Bucciarelli, L.G., Wendt, T., Qu, W., Lu, Y., Lalla, E., Rong, L.L., Goova, M.T., Moser, B., Kislinger, T., Lee, D.C., Kashyap, Y., Stern, D.M., Schmidt, A.M. " RAGE Blockade Stabilizes Established Atherosclerosis in Diabetic Apolipoprotein E-null Mice." *Circulation* 106:2827-35, 2002.

- Comment in: *Circulation* 106:2760-2763.

Bassouny, H.S., Zarins, C.K., Lee, D.C., Skelly, C.L., Fortunato, J.E., Glagov, S. "Diurnal Heart Rate Reactivity: a Predictor of Severity of Experimental Coronary and Carotid atherosclerosis." *Journal of Cardiovascular Risk* 9:331-8, 2002.

Lee, D.C., Oz, M.C., Weinberg, A.D., Ting, W. "Appropriate Timing of Surgical Intervention after Transmural Acute Myocardial Infarction." *Journal of Thoracic and Cardiovascular Surgery* 125:115-20, 2003.

Xu, Z., Qu, W., Lee, D.C., Schmidt, A.M. "Homo Sapiens Diaphanous mRNA" *GenBank* AY360322, 2003.

Kavarana, M.N., Frumento, R.J., Hirsh, A.L., Oz, M.C., Lee, D.C., Bennett-Guerrero, E. "Gastric Hypercarbia and Adverse Outcome after Cardiac Surgery" *Intensive Care Medicine* 29:742-8, 2003.

Lee, D.C., Wang, P., Hudson, B., Qu, W., Lu, Y., Schimdt, A.M., Joseph, K.A. "RAGE Antagonism Enhances the Effect of Cytotoxic Chemotherapy in Suppression of Tumor Growth and Metastases in Mice." Submitted to *Cancer Research*.

Grimblatov, V., Bekshaev, A.Y., Lee, D.C., Leonard, E.F. "Contrast Degradation and Vision Depth Limits in Reflectance Optical Imaging Through Turbid Media." Submitted to *Applied Optics*.

Lai, L.T., Lee, D.C., Ko, W., Shevde, K., Zhang, M. "Deficiency of complement factor MBL in a patient required cardiac surgery after an acute myocardial infarction with underlining chronic lymphocytic leukemia." Submitted to *International Journal of Cardiology*.

Lee, D.C., Chiu, A.K., Burack, J., Tak, V., Ko, W. "Systemic Absorption of Topical Vancomycin Paste in Sternal Wound Infection Prophylaxis." Submitted to *Journal of Thoracic and Cardiovascular Surgery*.

TEXTBOOK CHAPTER

Lee, D.C., Ting, W., Oz, M.C. "Myocardial Revascularization after Acute Myocardial Infarction." in Cohn, L.H., Edmunds, L.H. Jr. (ed.): *Cardiac Surgery in the Adult*, Second Edition. New York, McGraw-Hill, 2003; p 639-58.

ACCEPTED ABSTRACTS

Bassiouny, H.S., Lee, D.C., Zarins, C.K., Glagov, S., "Low Diurnal Heart Rate Variability Inhibits Experimental Carotid Stenosis." The American Society for Artificial Internal Organs, May, 1995.

Bassiouny, H.S., Lee, D.C., Zarins, C.K., Glagov, S., "Low Diurnal Heart Rate Variability Inhibits Experimental Carotid Stenosis." International Conference of Cardiovascular Surgery, June, 1995.

Lee, D.C., Bassiouny, H.S., Zarins, C.K., Glagov, S., "Low Diurnal Heart Rate Variability Inhibits Experimental Coronary Stenosis." The American Heart Association, November, 1995.

Bassiouny, H.S., Lee, D.C., Zarins, C.K., Glagov, S., "Low Diurnal Heart Rate Variability Inhibits Experimental Carotid Stenosis." American College of Surgeons, 1995.

Bassiouny, H.S., Lee, D.C., Glagov, S., Zarins, C.K. "Heart Rate Reactivity as a Predictor of the Severity of Experimental Carotid Stenosis." Society of Vascular Surgery, 2000.

Lee, D.C., Oz, M.C., Lin, S.X., Ting, W. "Optimal Timing of Coronary Revascularization – Transmural Versus Nontransmural Acute Myocardial Infarction." Society of Thoracic Surgery, 2000.

Lee, D.C., Oz, M.C., Lin, S.X., Weinberg, A.D., Ting, W. "Quality of Care and Outcome in Coronary Revascularization: Are There any Differences between Mandatory and Voluntary Reporting?" *Journal of the American College of Surgeons* 191:S85-86, 2000.

Lee, D.C., Ting, W. "Optimal Timing of Coronary Revascularization – Transmural Versus Nontransmural Acute Myocardial Infarction." CAMS, 2000.

Kavarana, M.N., Frumento, R.J., Hirsh, A.L., Oz, M.C., Mets, B., Lee, D.C., Bennett-Guerrero, E. "Association of Sublingual PCO₂, Gastric PCO₂, and Adverse Outcome Following Cardiac Surgery." American Society of Anesthesia, 2001.

Lee, D.C., Oz, M.C., Weinberg, A.D., Ting, W. "Appropriate Timing of Surgical Intervention after Transmural Acute Myocardial Infarction." American Association for Thoracic Surgery, 2001.

Lee, D.C., Grimblatov, V., Avila, L., Laine, A. Heinz, T.F., Oz, M.C., Leonard, E.F. "Endoscopic Visualization through Blood." American Society of Artificial Internal Organs, 2001.

Lee, D.C., Qu, W, Lu, Y., Stern, D.M., Schmidt, A.M. "Blockade of RAGE Suppresses Growth, Metastases, and Progression of Mammary Tumors in a Murine Model of Breast Cancer." American College of Surgeons, 2001.

Bucciarelli, L.G., Wendt, T.M., Qu, W., Lu, Y., Lalla, E., Goova, M.T., Rong, L.L., Moser, B., Lee, D.C., Kashyap Y., Stern, D.M., Schmidt, A.M. "RAGE Blockade Suppresses Migration and Activation of Mononuclear Phagocytes and Vascular Smooth Muscle Cells in Diabetic Vascular Lesions: Implications for Atherosclerotic Lesion Stabilization." Keystone Symposia in Inflammatory Paradigms and the Vasculature II, 2002.

Grimblatov, V., Lee, D.C., Oz, M.C., Leonard, E.F. "Spectral Analysis of Optical Imaging Through Blood." SPIE-The International Society for Optical Engineering, 2002.

Lee, D.C., Frumento, R.J., Oz, M.C., Bennett-Guerrero, E. "N-Acetylcysteine and Total Plasma Antioxidant Status in High Risk Cardiac Surgical Patients." Society of Cardiovascular Anesthesia, 2002.

Lee, D.C., Xu, Z., Qu, W., Lu, Y., Anderson, D., Stern, D.M., Schimdt, A.M. "Blockade of Receptor for AGE (RAGE) Suppresses Growth and Metastases of Mammary Tumors in a Murine Model of Breast Cancer." *Proceedings of the American Association for Cancer Research* 43:197, 2002.

Waterhouse, R.N., Fawwaz, R., Collier L., Dumont F., Lee, D.C., Schmidt A.M., Van Heertum, R. "The Sigma-1 Receptor PET Radiotracer [¹⁸F]FPS1: Potential Advantages over [¹⁸F]FDG For Tumor Visualization Demonstrated in Pre-Clinical Models." Society of Nuclear Medicine, 2002.

Lee, D.C., del Toro, G., Xu, Z., Kim, J., Qu, W., Lu, Y., Stern, D.M., Schmidt, A.M. "Blockade of RAGE and Cytotoxic Chemotherapy Enhances Suppression of Experimental Metastases." *Journal of the American College of Surgeons* 195:S67-68, 2002.

Chiu, A.K., Ko, W., Lee, D.C. "Systemic Absorption of Topical Vancomycin Paste in Sternal Wound Infection Prophylaxis." In Press. American College of Surgeons. 2008.

PRESENTATIONS

Lee, D.C., Rodriguez, E.K., McCulloch, A.D. "Effect of Residual Stress on Transmural Sarcomere Length Distributions in Rat Left Ventricle." University of California at San Diego Research Conference, May, 1992.

Lee, D.C., Bassiouny, H.S. "Diurnal Heart Rate Variability and Experimental Carotid Atherosclerosis." University of Chicago Pritzker Research Forum, October, 1994.

Bassiouny, H.S., Lee, D.C., Zarins, C.K., Glagov, S. "Low Diurnal Heart Rate Variability Inhibits Experimental Carotid Stenosis." Society for Vascular Surgery/North American Chapter, International Society for Cardiovascular Surgery, June 11, 1995.

Bassiouny, H.S., Lee, D.C., Zarins, C.K., Glagov, S. "Low Diurnal Heart Rate Variability Inhibits Experimental Carotid Stenosis." American College of Surgeons, 1995.

Bassiouny, H.S., Lee, D.C., Glagov, S., Zarins, C.K. "Heart Rate Reactivity as a Predictor of the Severity of Experimental Carotid Stenosis." Society of Vascular Surgery, 2000.

Lee, D.C., Oz, M.C., Lin, S.X., Ting, W. "Optimal Timing of Coronary Revascularization – Transmural Versus Nontransmural Acute Myocardial Infarction." Society of Thoracic Surgery, 2000.

Lee, D.C., Oz, M.C., Lin, S.X., Weinberg, A.D., Ting, W. "Quality of Care and Outcome in Coronary Revascularization: Are There any Differences between Mandatory and Voluntary Reporting?" American College of Surgeons, 2000.

Lee, D.C., Ting, W. "Optimal Timing of Coronary Revascularization – Transmural Versus Nontransmural Acute Myocardial Infarction." CAMS Scientific Session, 2000.

Kavarana, M.N., Frumento, R.J., Hirsh, A.L., Oz, M.C., Mets, B., Lee, D.C., Bennett-Guerrero, E. "Association of Sublingual PCO₂, Gastric PCO₂, and Adverse Outcome Following Cardiac Surgery." American Society of Anesthesia, 2001.

Lee, D.C., Oz, M.C., Weinberg, A.D., Ting, W. "Appropriate Timing of Surgical Intervention after Transmural Acute Myocardial Infarction." American Association for Thoracic Surgery, 2001.

Lee, D.C., Grimblatov, V., Avila, L., Laine, A. Heinz, T.F., Oz, M.C., Leonard, E.F. "Endoscopic Visualization through Blood." American Society for Artificial Internal Organs, 2001.

Lee, D.C., Qu, W, Lu, Y., Stern, D.M., Schmidt, A.M. "Blockade of RAGE Suppresses Growth, Metastases, and Progression of Mammary Tumors in a Murine Model of Breast Cancer." American College of Surgeons, 2001.

Bucciarelli, L.G., Wendt, T.M., Qu, W., Lu, Y., Lalla, E., Goova, M.T., Rong, L.L., Moser, B., Lee, D.C., Kashyap Y., Stern, D.M., Schmidt, A.M. "RAGE Blockade Suppresses Migration and Activation of Mononuclear Phagocytes and Vascular Smooth Muscle Cells in Diabetic Vascular Lesions: Implications for Atherosclerotic Lesion Stabilization." Keystone Symposia in Inflammatory Paradigms and the Vasculature II, 2002.

Grimblatov, V., Lee, D.C., Oz, M.C., Leonard, E.F. "Spectral Analysis of Optical Imaging Through Blood." SPIE-The International Society for Optical Engineering, 2002.

Lee, D.C., Frumento, R.J., Oz, M.C., Bennett-Guerrero, E. "N-Acetylcysteine and Total Plasma Antioxidant Status in High Risk Cardiac Surgical Patients." Society of Cardiovascular Anesthesia, 2002.

Lee, D.C., Xu, Z., Qu, W., Lu, Y., Anderson, D., Stern, D.M., Schimdt, A.M. "Blockade of Receptor for AGE (RAGE) Suppresses Growth and Metastases of Mammary Tumors in a Murine Model of Breast Cancer." American Association for Cancer Research, 2002.

Waterhouse, R.N., Fawwaz, R., Collier L., Dumont F., Lee, D.C., Schmidt A.M., Van Heertum, R. "The Sigma-1 Receptor PET Radiotracer [¹⁸F]FPS1: Potential Advantages over [¹⁸F]FDG For Tumor Visualization Demonstrated in Pre-Clinical Models." Society of Nuclear Medicine, 2002.

Lee, D.C., del Toro, G., Xu, Z., Kim, J., Qu, W., Lu, Y., Stern, D.M., Schmidt, A.M. "Blockade of RAGE and Cytotoxic Chemotherapy Enhances Suppression of Experimental Metastases." American College of Surgeons, 2002.

Lee, D.C. "Coronary Artery Bypass Grafting in Acute Myocardial Infarction." Yale University School of Medicine Department of Surgery Grand Rounds, 2005.

Chiu, A.K., Ko, W., Bacchetta, M, Lee, D.C. "Off-pump versus On-pump CABG in Octogenarians: Comparison of Short Term Outcomes and Long Term Survival." State University of New York Downstate Medical Center Research Conference, 2008.

Lai, L.T., Lee, D.C., Ko, W., Shevde, K., Zhang, M. "Deficiency of complement factor MBL in a patient required cardiac surgery after an acute myocardial infarction with underlining chronic lymphocytic leukemia." State University of New York Downstate Medical Center Research Conference, 2008.

Chiu, A.K., Ko, W., Lee, D.C. "Systemic Absorption of Topical Vancomycin Paste in Sternal Wound Infection Prophylaxis." American College of Surgeons. 2008.

EXTRACURRICULAR ACTIVITIES

2001-present American Orchid Society

1997-1998 Resident Representative

1997 Teaching Assistant, Physical Diagnosis Course

1995 Principal Organizer, first annual medical school faculty-student dinner

1994 Vice President, American Medical Student Association, University of Chicago Chapter

1991-1993 Classical guitar quartet, lead guitarist

1989-1991 Rock band - lead guitarist, keyboardist

1988-present Church activities - guitarist, language interpreter