BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME	POSITION TITLE
Katz, Laurence, Matthew	Associate Professor of Emergency Medicine
eRA COMMONS USER NAME lmkatz	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Rutgers University, New Brunswick, New Jersey		1978-1980	Zoology
Drew University, Madison, New Jersey	B.A.	1980-1982	Zoology/chemistry
Rutgers Medical School, Piscataway, New Jersey	M.D.	1983-1987	Medicine
New England Deaconess Hospital, Boston	Residency	1987-1990	Internal Medicine
University of Pittsburgh Medical Center, Pittsburgh,	Residency	1990-1993	Emergency Medicine
University of Pittsburgh Medical Center, Pittsburgh,	Fellowship	1990-1993	Resuscitation

A. Positions and Honors

Professional Experience:

1993-1995 Research Faculty, International Resuscitation Research Center, Pittsburgh, PA
1993-1995 Assistant Professor of Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA
1995-1996 Assistant Professor of Emergency Medicine, University of Miami Medical Center
Director of Emergency Medicine Research
1996-current Associate Professor (tenured) of Emergency Medicine, University of North Carolina at Chapel Hill

Honors/Awards

1985 Summer Research Fellowship, Rutgers Medical School
1992 Resident Research Scholarship Award, Emergency Medicine Foundation
1993 Center for Emergency Medicine, Teaching excellence award, Pittsburgh, PA
1994 Laerdal Acute Medicine Foundation Conference Grant IRRC ’94
1995 American Heart Association, Florida Affiliate Grant in Aid In vivo effects of carbicarb and hypothermia on cerebral pathophysiology and outcome after asphyxial cardiac arrest in rats.
1998 Junior Faculty Award in Research Complete Cardiopulmonary Bypass in the Rat: Investigation of Neurological Outcome.
1998 American Heart Association, Mid-Atlantic Grant in Aid. Rapid and prolonged induction of hypothermia after hypoxic-ischemia.
2000 Best Basic Science Faculty Award Society for Academic Emergency Medicine 2000 for Neurotensin research.

B. Selected peer-reviewed publications

Katz L, Vaagenes P, Safar P, Diven W. Brain enzyme changes as markers of brain damage in a rat cardiac arrest model. Effects of corticosteroid therapy. *Resuscitation*. 1989;17:39-53.

Katz L, Ebmeyer U, Safar P, Radovsky A, Neumar R. Outcome model of asphyxial cardiac arrest in rats. *J Cereb Blood Flow Metab.* 1995;15(6):1032-1039.

Neumar R, Bircher B, Sim K, Xiao F, Zadach K, Radovsky A, Katz L, Ebmeyer U, Safar P. Epinephrine and sodium bicarbonate during CPR following asphyxial cardiac arrest in rats. *Resuscitation.* 1995;29:249-263.

Ebmeyer U, Abramson N, Katz L. Current research directions in cerebral resuscitation after cardiac arrest. *Current Opinion in Critical Care.* 1995;1:182-188.

Marion DW, Leonov Y, Ginsberg M, Katz L, Kochanek PM, Lechleuthner A, Nemoto EM, Obrist W, Safar P, Sterz F, Tisherman S, White RJ, Xiao F, Zar H. Resuscitative hypothermia. *Critical Care Medicine.* 1996;24(Suppl 2):S81-S89.

Gisvold S, Sterz F, Abramson N, Bar-Joseph G, Ebmeyer U, Gervais H, Ginsberg M, Katz L, Kochanek P, Kuboyama K, Miller B, Obrist W, Roine R, Safar P, Sim K, Vandevelde K, White R, Xiao F. Cerebral resuscitation from cardiac arrest: Treatment potentials. *Critical Care Medicine*. 1996;24(Suppl 2):S69-S80.

Ebmeyer U, Katz L, Safar P, Bircher N, Tisherman S, Pretto E, Klain M, Kochanek P. Concluding comments and suggestions for young resuscitation researchers. *Critical Care Medicine.* 1996*;*24(Suppl 2):S95-S99. Safar P, Ebmeyer U,

Katz L. Future directions for resuscitation research: Introduction. *Critical Care Medicine.* 1996;24(Suppl 2):S1-S2.

Radovsky A, Katz L, Ebmeyer U, Safar P. Ischemic neurons in rat brains after 6, 8, or 10 minutes of transient hypoxic ischemia. *Toxicologic Pathology*. 1997;25(5):500-505.

Kochanek P, Uhl M, Schoettle K, Katz L**,** Clark R, Safar P. Hypoxic-ischemic encephalopathy: Pathobiology and therapy of the postresuscitation syndrome in children. pp 671-691, Fuhrman and Zimmernam, Pediatric Critical Care, Second edition, Mosby, St Louis Missouri, 1997.

Katz L, Callaway C, Kagan V, Kochanek P. Electron spin resonance measure of brain antioxidant activity during ischemia/reperfusion. *NeuroReport.* 1998;9(7):1587-1593.

Katz L, Wang F, Ebmeyer U, Radovsky A, Safar P. Glucose plus insulin infusion improves cerebral outcome after asphyxial cardiac arrest. *Neuroreport.* 1998;9(15):3363-3367.

Marks B, Katz L, Hacky J, Foss W, Torok D. Spectral analysis of heart rate variability and pulmonary responses to topical application of 2% aminophylline-based thigh cream. *International J Obesity.* 1999;23:198-202.

Lightfoot T, Katz L, DeBate C. Naloxone decreases tolerance to a hypotensive, hypovolemic stress in healthy humans. *Critical Care Medicine*. 2000;28:684-691.

Ebmeyer U, Katz L. Brain energetics of cardiopulmonary cerebral resuscitation. *Curr Opin Crit Care* 2001:7:189-194.

Katz L, Wang Y, Tyler B, Richelson E. Neurotensin Analogue NT69L Induces Rapid and Prolonged Hypothermia after Hypoxic-Ischemia. *Acad Emerg Med* 2001:8:1115-1121.

Katz L, Lotocki G, Wang Y, Dietrich D, Keane R. Regulation of Caspases and XIAP in the Brain After Asphyxial Cardiac Arrest in Rats. *Neuroreport* 2001;12:3751-4.

Callaway C, Katz L, Lipinski C, Brader E. Feasibility of External Cranial Cooling During Out-of-Hospital Cardiac Arrest. *Resuscitation* 2002;52:159-65.

Katz L, Wang F, Rockoff S, Bouldin T. Low dose carbicarb improves neurological outcome after asphyxial cardiac arrest in rats. *Ann Emerg Med* 2002;39:359-365.

Katz L, Young A, Frank J, Coleman W, Wang Y, Park K. Survival of Liver Stem Cells in the Brain after Asphyxial Cardiac Arrest in Rats. *Acad Em Med* 2003:10:424-425.

Gordon C, Richelson E, McMahon B, Pardos B, Katz L. Neurotensin Induces Regulated Hypothermia in Rats. *Life Sci* 2003:73:2611-2623.

Rich, P, Dulabon G, Douillet C, Listwa T, Robinson W, Zarzaur B, Pearlstein R, Katz L. Infrared thermography: a rapid, portable, and accurate technique to detect experimental Pneumothorax. *Mol Pathol* 2003:56:86-96.

Katz L, Young A, Frank J, Wang Y, Park K. Neurotensin-induced hypothermia improves neurological outcome after hypoxic-ischemia. *Critical Care Medicine* 2004:32:806-810.

Katz L, Young A, Frank J, Wang Y, Park K. Regulated Hypothermia Reduces Brain Oxidative Stress after Hypoxic-Ischemia *Brain Research* 2004:1017:85-91.

Dave K, Raval A, Prado R, Katz L, Sick T, Ginsberg M, Busto R, Perez-Pinzon M. Mild cardiopulmonary arrest promotes synaptic dysfunction in rat hippocampus. *Brain Research* 2004:1024:89-96.

Raval AP, Dave KR, Prado R, Katz LM, Busto R, Sick TJ, Ginsberg MD, Mochly-Rosen D, Perez-Pinzon MA. Protein Kinase C Delta cleavage initiates an aberrant signal transduction pathway after cardiac arrest and oxygen glucose deprivation. *J Cereb Blood Flow Metab* 2005:25:730-41.

Vukmir R, Katz LM, Sodium Bicarbonate Study Group. Sodium bicarbonate improves outcome in prolonged prehospital cardiac arrest. Am J Emerg 2006:24:156-61.

Katz LM, Nauriyal V, Nagaraj S, Finch A, Pearlstein K, Szymanowski A, Sproule C, Rich P, Guenther B, Pearlstein R. Infrared Imaging for Detection of Acute Compartment Syndrome of the Leg. Crit Care Med (in press 2008)

C. Research Support.

Research Project: Hemoglobin-Based Oxygen Carrier Formulation and Treatment in Severe Hemorrhagic Shock
Co-PIs: Laurence Katz and James Manning
Funding Agency: Naval Medical Research Center
Description: Evaluation of hemodynamics and survival of oxygen carrying solutions for resuscitation from severe hemorrhagic shock.

Research Project: Selective Aortic Arch Perfusion with a Hemoglobin-Based Oxygen Carrier to Treat Cardiac Arrest and Hemorrhagic Shock
Co-PIs: Laurence Katz and James Manning
Funding Agency: BioPure Corporation
Description: The goal of this research is to evaluate the potential benefit of intravenous infusion of hemoglobin-based oxygen carrier in severe hemorrhagic shock.

Research Project: Treatment of Brain Damage after Asphyxial Cardiac Arrest
PI: Laurence Katz
Funding Agency: AstraZeneca
Description: Examine neurological outcome after resuscitation from asphyxial cardiac arrest.