Date: December 31, 2006

UNIVERSITY OF KANSAS SCHOOL OF MEDICINE
FACULTY CURRICULUM VITAE

PERSONAL DATA

Name: Sue-Min Lai
Academic Rank: Professor with tenure
Department: Preventive Medicine & Public Health

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PROFESSIONAL DEVELOPMENT

Undergraduate and Graduate Education

Years (Inclusive)	Degree	Institution
1975-1979	B.A. (Economics)	National Cheng Chi University Taipei, Taiwan
1980-1981	M.B.A. (Accounting)	Miami University, Oxford, OH
1983-1985	M.S. (Statistics)	Temple University, Philadelphia, PA
1991-1992	Ph.D. (Epidemiology)	University of Pittsburgh, Pittsburgh, PA

Postgraduate Education:

Years (Inclusive)	Area of Study	Institution
1993	Transcatheter Cardiovascular Therapeutics Course: A Multi-Device Lesion Specific Approach	Washington Hospital Center Washington, DC
1996	Clinical Aspects of Stroke Diagnosis and Treatment	North American Stroke Conference Colorado Springs, CO
1998	Bracing Sagittal Plane Spinal Deformity	Scoliosis Research Society New York, NY
1999	Outcomes and Effectiveness Research	Johns Hopkins University Baltimore, MD
1999	Complications in Management of Spine Disorders	Scoliosis Research Society San Diego, CA
1999	Isola Instrumentation	University of Kansas Medical Center, Kansas City, KS

2001	The Disabling Diseases of Aging: Epidemiology & Prevention	University of Michigan Ann Arbor, MI
2002	Advanced Course in Design and Conduct of Clinical Trials	University of Michigan Ann Arbor, MI
2003	Meta Analysis	University of Michigan Ann Arbor, MI
2004	Complex Sample Survey Data Analysis With SUDAAN	University of Michigan Ann Arbor, MI

Academic and Other Professional Appointments and Activities (List in chronological order. Please explain any discontinuity in your professional experience.):

Month and Year	Position	Institution
Sept 1981 - May 1983	Instructor	Department of Mathematics & Statistics, Miami University, OH
Sept 1984 - Aug 1985	Instructor	Department of Statistics Temple University, PA
Sept 1985 - Aug 1987	Research Associate	Department of Neurology Temple University Hospital, PA
May 1987 - Dec 1991	Statistician	Division of Dermatology & Department of Neurosurgery Hahnemann University, PA
Sept 1987 - May 1991	Epidemiologist/Statistician	Department of Neurology Medical College of Pennsylvania, PA
June 1990 - Aug 1991	Instructor	Graduate School of Medicine Hahnemann University, PA
May 1991 - Jul 1993	Research Specialist	Department of Epidemiology University of Pittsburgh, PA
June 1991 - Jul 1995	Statistician	Department of Neurology Medical College of Pennsylvania, PA
Sept 1993 - June 1998	Assistant Professor	Department of Preventive Medicine University of Kansas Medical Center Kansas City, KS
Aug 1993 - May, 1995	Adjunct Faculty	School of Allied Health Wichita State University Wichita, KS
Aug 1997 - Jul, 1999	Adjunct Associate Professor	The King/Drew Medical Center Department of Neurosciences

		Los Angeles, CA
Sept 1994 - Present	Director	Kansas Cancer Registry University of Kansas Medical Center Kansas City, KS
Jul 1998 – June 2005	Associate Professor with tenure	Department of Preventive Medicine University of Kansas Medical Center Kansas City, KS
Nov 1998 - Present	Associate Scientist	Center on Aging University of Kansas Medical Center, Kansas City, KS
Jul 2005 - Present	Professor	Department of Preventive Medicine and Public Health University of Kansas Medical Center, Kansas City, KS

Professional Registration/Licensure:

Year	Number	State
N/A		

Professional Certification(s):

Date	Board
N/A	

Professional Societies and Affiliations:

Year	Organization (including offices held)
1993 - Present	American Heart Association Epidemiology and Prevention Council
1993 - Present	American Heart Association Stroke Council
1993 - Present	Society for Epidemiologic Research
1993 - Present	National Stroke Association
1993 - Present	World Federation of Neurology - Research Group on Neuroepidemiology
1993 - Present	American Statistical Association
1994 - Present	National America Association of Central Cancer Registries
1994 - Present	International Association of Cancer Registries
1999 - Present	American Academy of Neurology
2000	North America Association of Central Cancer Registries
2001 - Present	Association of Teachers of Preventive Medicine
2004	Fellow, International Research Society of Spine Deformities

Honors and Awards: (honorary societies, research awards, teaching awards etc.)

Year	Award

1980 - 1981	Scholarship from Miami University, OH
1983 - 1985	Scholarship from Temple University, PA
1991 - 1992	Scholarship from University of Pittsburgh, PA
1999	Patent co-owner, the Stroke Impact Scale (SIS)
1999	The Russell S. Hibbs Clinical Award for "Development and Validation of the SRS Outcome Instrument", Scoliosis Research Society
1999	Silver Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries
2000	Invited speaker to the President's Cancer Panel sponsored by the National Cancer Institute.
2000	Outstanding Presentation Award for "Depression and Stroke Recovery", Veterans Affairs Rehabilitation Research & Development Service.
2000	Silver Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries
2001	Expert Witness - Invited by the U.S. Senate Sub-committee for Cancer Coalition to provide testimony to the "Hearing on Cancer Clusters", Senator Diane Feinstein Chairperson
2001	Gold Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries
2002	Co-Chair, Section of Epidemiology of Spine Deformity, International Research Society of Spinal Deformities, Athens, Greece
2002	Gold Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries
2003	Expert Witness - Invited by the KS Senate Committee of Public Health and Welfare
2003	Gold Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries
2003	Neurological and Behavioral Sciences – Presidential Poster Award for "Newly Developed Depressive Symptoms after Stroke and Their Impact on Health Related Quality of Life", American Geriatrics Society
2003	Poster Award for "Hospices – Another Source of Cancer Reporting", North America Association of Central Cancer Registries
2004	Gold Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries
2004	Poster Award for "Pathology and Dermatology Reports: Key in Completeness of Melanoma Cancer Reporting in Population-based Cancer Registries", North America Association of Central Cancer Registries
2006	Gold Certification of Central Cancer Registry Data Quality, Completeness, and Timeliness, North America Association of Central Cancer Registries

Editorial Activity

1996 - Present	Editorial Boards, Neuroepidemiology
1998 - Present	Executive Committee, World Federation of Neurology – Research Group in Neuroepidemiology
2000 - Present	Reviewer, Neurology
2000 - Present	Reviewer, Mayo Clinic Proceedings
2000 - Present	Reviewer, Archives of Physical Medicine and Rehabilitation
2001 - Present	Reviewer, Stroke
2001 - Present	National Program of Cancer Registries, CDC: Scientific Workgroup for

	Publication of the United States Cancer Statistics
2002 - Present	Reviewer, Journal of Rehabilitation Research and Development
2002 - Present	Reviewer, Journal of Quality of Life Research
2004	Reviewer, American Journal of Medicine
2005 – Present	Reviewer, Annals of Epidemiology
2005 – Present	Reviewer, Annals of Epidemiology
2004 – 2006	Editor, U.S. Colorectal Cancer Monograph (will appear as a supplement of journal Cancer)

Study Sections/Review Panel

2000 - 2004	Prevention Research Center Grants Review Panel, Centers for Disease Control and Prevention (CDC)
Jun, 2000	Possible Extramural Research Topics (PERTS) – RFA, CDC (grant reviewer)
May, 2001	Cancer Prevention and Control Conference Abstract Review Panel, CDC
Jun, 2001	Prevention Research Center Grants, CDC
Mar, 2002	Cancer Prevention and Control Conference Abstract Review Panel, CDC
Apr, 2003	Cancer Prevention and Control Conference Abstract Review Panel, CDC
2002 - 2003	Preventive Medicine and Public Health Fellowship Program, Association of Teachers of Preventive Medicine (ATPM) and CDC – Fellowship Application Reviewer
2003	Canadian Stroke Network Study Section
Jan, 2004	Scientific Evaluator, the University of Health Sciences Research Symposium
Jun, 2004	Study Section, Prevention Research Center Grants, CDC
2004 – 2005	NIH Epidemiology of Chronic Diseases (ECD) Study Section
2004 – 2005	Abstract review committee, Harrington Spine Symposium
2005 – 2009	Charter Member, NIH Cardiovascular and Sleep Epidemiology Study Section

TEACHING ACTIVITIES

Brief statement of areas of teaching interest:

As a teacher and mentor with epidemiology and statistics as specialties, my overall goals in education are to strengthen and improve the skill sets of our students, residents, and faculty in applying evidence based medicine, as well as educating them in the proper employment of epidemiological skills necessary for synthesizing scientific findings and designing studies to test specific hypotheses. My past ten years at KU have been a mix of teaching activities including didactic teaching, grand rounds, small group discussions, seminars/lectures, workshops, symposiums, and one-on-one mentoring. Areas of teaching interest include, but are not limited to, Chronic Disease Epidemiology (specifically, Epidemiology in Aging, Cancer Epidemiology, and Neuroepidemiology), Advanced Epidemiologic Methods, Survival Analysis, Research Methodology, Clinical Trials, and Grant Writing.

Didactic (e.g.: lectures and formal presentations):

Academic			Instruction		Student	
Year	Course	Title	Type	Hours	No	Type
1983		Calculus			50	Undergraduate
1983		Intermediate Algebra & Trigonometry			45	Undergraduate

1983-85		Statistical Methods & Concepts			40	Undergraduate
1983-85		Special Topics in Statistics			30	Undergraduate
1986		Biostatistics	Lecture	2 Lectures	15	Residents/ Neurologists
		Research Methods & Designs	Lecture	2 Lectures	20	Residents/ Neurologists
1990-91		Statistical Computing			30	Nursing
1990-91		MCAT Prep Course			50	Prospective Medical School Students
1994		Clinical Sciences I Statistics	Lecture	2 Lectures	175	Medical School Students
1994	PRVM802	Advanced Epid Methods	Semester		4	Graduate
1994	PRVM804	Biostatistics	Semester		22	Graduate
1995	PRVM804	Biostatistics	Semester		15	Graduate
1995	PRVM806	SAS	Semester		10	Graduate
1995	PRVM804	Biostatistics	Semester		25	Medical School Pre-matriculation Students
1995	PRVM802	Advanced Epid Methods	Semester		8	Graduate
1996	PRVM806	Epidemiology in Aging	Semester		7	Graduate
1996	PRVM806	SAS	Semester		6	Graduate
1996	PRVM802	Advanced Epid Methods	Semester		6	Graduate
1997	PRVM836	Epidemiology in Aging	Semester		5	Graduate
1997	PRVM871	SAS	Semester		4	Graduate
1997	PHCL939/ PTOX939	Carcinogenesis and Cancer Biology	2 lectures		4	Ph.D. students
1997	PRVM841	Advanced Epid Methods	Semester		4	Graduate
1997	PRVM850	Cancer Epidemiology	One lecture		6	Graduate
1998	PRVM836	Epidemiology in Aging	Semester		4	Graduate
1998	PRVM871	SAS	Semester		4	Graduate
1998	PRVM841	Advanced Epid Methods I	Semester		3	Graduate
1998		Seminar	1 lecture		15	Graduate
1999	Grand Rounds on Research Methods and Analysis (Comment by Chief Resident "This was the best grand rounds of the year.")				10+	Orthopedic Surgery Residents
1999	PRVM842	Advanced Epid Methods II	Semester		3	Graduate
1999	PRVM871	SAS	Semester		11	Graduate
1999	CME	Quality of Life after Stroke Center on Aging Research Seminar	Lecture (1 hour)		30+	Physicians & Fellows
1999	PHCL939/	Carcinogenesis and Cancer	Lectures (6 hours)		9	Ph.D. Students

	PTOX939	Biology			
1999	PRVM841	Advanced Epid Methods I	Semester	9	MPH
2000	PRVM 836	Epidemiology in Aging	Semester	3	MPH students
2001	PHCL939/ PTOX939	Carcinogenesis and Cancer Biology	Lectures (6 hours)	8	Ph.D. Students
2001	PRVM 841	Advanced Epid Methods I	Semester	7	MPH students + Faculty
2002	PRVM 836	Epidemiology in Aging	Semester	3	MPH students
2002	PRVM 841	Advanced Epid Methods I	Semester	5	MPH students
2002	CME	Stroke Outcomes Assessment mRECT study – North America, San Francisco, CA	Lecture (1 hour)	300+	Neurologists, clinical nurses
2002	CME	Validation of the Stroke Impact Scale – 2506/ INT0104 study, San Francisco, CA	Lecture (1 hour)	150+	Neurologists, clinical nurses
2002	PRVM 850	Cancer Epidemiology	Lecture (1 hours)	4	MPH students
2002	CME	Assessment of Outcomes in Acute Stroke Trials - Vancouver, Canada	Lecture (1 hour)	200+	Neurologists, clinical nurses
2003	PRVM842	Advanced Epid Methods II	Semester	4	MPH students
2003	CME	Stroke Outcomes Assessment mRECT study – Rome, Italy	Lecture (1 hour)	300+	Neurologists, clinical nurses
2003	PHCL939/ PTOX939	Carcinogenesis and Cancer Biology	Lectures (6 hours)	6	Ph.D. Students
2003	PRVM841	Advanced Epid Methods I	Semester	4	MPH students
2004	PRVM836	Epidemiology in Aging	Semester	3	MPH students
2004	HSCA857	Evaluating Outcomes of Health Care	Lecture (3 hours)	16	HSCA students
2004	NRSG754	Nursing Research	Lecture (2 hours)	6	Nursing graduate students
2004	PRVM802	Epidemiology Lab	Semester	5	MPH & MS students
2005	PRVM841	Advanced Epid Methods I	Semester	3	MPH & MS students

2005	Center on Aging's Lecture Series	Therapeutic exercise & Depression after stroke	Lecture (1 hour)	30+	Faculty, clinicians, researchers
2005	HPDP	Cancer Epidemiology & Screening	Lecture (1 hour)	100+	Med School students
2005	PRVM842	Advanced Epid Methods II	Semester	3	MS students
2005	PRVM802	Epidemiology Lab	Semester	6	MPH & MS students
2006	PRVM841	Advanced Epid Methods I	Semester	5	MS & MPH students
2006	PRVM842	Advanced Epid Methods II	Semester	3	MPH & MS students
2006	PHCL 939	Carcinogenesis & Cancer	Lecture (3 hours)	10	Ph.D. & MS students

Nondidatic (e.g.: workshops, labs and discussion groups):

Academic Year	Course	Title	Instruction Type	Instruction Hours	Student No	Student Type
1995	Clinical Sciences I		Small Group Discussion		25	Medical School Students
1996	Clinical Sciences I		Small Group Discussion		20	Medical School Students
1998	Workshop	Co-sponsored with Doren Fredrickson on a workshop which provided MPH students with skills/training in preparation of poster exhibits for scientific meetings.				
1998	Grant Writing				3	Graduate
	(Served as mentor for 3 students who took the Grant Writing Class from Dr. Duncan)					
1998	PRVM 806	Independent Studies			2	Graduate students
1998	PRVM 890	Research Project			3	Graduate students
1998	PRVM 899	Thesis			5	Graduate students
1999	CME	Stroke Recovery Symposium		5 hours	over 100	Physicians, nurses, physical and occupational therapists
1999	CME	Functional Outcomes Assessment	Conference Workshops	4 hours	50+	Neurologists, geriatricians, nurses, and therapists
1999	PRVM 806	Independent Studies			2	Graduate students
1999	PRVM 890	Research Project			2	Graduate students
1999	PRVM 899	Thesis			2	Graduate students
2000	Orthopedic Grand Rounds (Epidemiology & research design)		Lecture	1 hour	12	Orthopedic surgeons & fellows

2000	Interdisciplinary Research Seminar (IRS)		Seminar	1 hour	10+	MPH students & faculty

Title: Effect of Irradiation on Risk of Mortality from Myocardial Infarction in Breast Cancer Patients

2000	PRVM 890	Research Project			2	Graduate students
2000	PRVM 899	Thesis			2	Graduate students
2001	Orthopedic Grand Rounds (Analysis of covariance & sample size)		Lecture	1 hour	15	Orthopedic surgeons & fellows
2001	CME	Stroke Recovery in Depressive Patients	Seminar	1 hour	35+	Physicians, nurses, PTs & OTs
2001	PRVM 890	Research Project			3	Graduate students
2002	Orthopedic Grand Rounds (Design of clinical trials)		Lecture	1 hour	10	Orthopedic surgeons & fellows
2002	PRVM 806	Independent Studies			2	Graduate students
2002	PRVM 890	Research Project			2	Graduate students
2002	PRVM 899	Thesis			2	Graduate students
2002	IRS	Health Related Quality of Life After Stroke	Seminar	1 hour	25+	MPH + faculty
2002	CME	Assessment of Depression after Stroke	Lecture	1 hour	150+	Neurologists, clinical nurses
2003	PRVM 899	Thesis			3	Graduate students
2003	PRVM 890	Research Project			3	Graduate students
2003	PRVM 806	Independent Studies			4	MPH students
2003	IRS	Access to Prostate Cancer Care in Kansas – Using GIS Technology	Seminar	1 hour	30+	MPH + faculty
2004	PRVM 899	Thesis			3	Graduate students
2004	PRVM 890	Research Project			3	Graduate students
2004	ENT Grand Rounds	Kansas Cancer Registry – A Vehicle for Cancer Patients Follow-up	Lecture	1 hour	10+	ENT residents, faculty & fellows

Clinical:

Year	Hours	Student No	Type	Length of Service
N.A.				

Master's and Ph.D. theses directed:

Chaired the following MPH student's thesis committees:

Year	Student Name	Thesis title	Degree completed/ In Progress
1995-96	Ron Griffin	Effect of Service Coordination on Morbidity and Mortality of the HIV Infected Patient, Kansas City Metropolitan Area, 1989-1995	MPH -- Completed
1996-97	Steve Speise	Urban and Rural Differences in Prostate Cancer in Kansas	MPH -- Completed
1997-98	Caryl Olmstead	Survival Prognosis in Patients Infected with Vancomycin-Resistant Enteroccoci (VRE)	MPH -- Completed
1997-98	Kenneth Davis	Factors Influencing Short Stays in Nursing Homes	MPH -- Completed
1997-98	Tiffany Wilkinson	Risk of Chronic Hepatitis in HIV Infected Patients	MPH -- Completed
1998-99	Joni Stoker Yates	Risk Factors with Fall in Stroke Patients	MPH -- Completed
1998-99	Suzanne Lassman	Development of a Model to Predict Expected Number of Invasive Cancers Diagnosed or Treated in a Kansas Hospital	MPH -- Completed
2001-02	Connor Knightly	Recovery of Upper and Lower Extremity Motor Function after Stroke	MPH -- Completed
2002-03	Phong Hu	Long-term Outcomes in Stroke Patients Admitted < 3 hours Window	MPH -- Completed
2002-04	Troy Richardson, MS	Impact of Diabetes on Health Related Quality of Life after Stroke	MPH - Completed
2003-	Eric Elsinghorst, PhD	Identification of Missed Opportunities Tuberculosis Infection	MPH -- In progress
2003-	Monica Mattson, MS	Use of Old vs New Antidiabetic Drugs in Medicaid Patients	MPH – In progress
2004-	Vinutha Kumar, MD	Staphylococus aureus bacteremia in elderly patients	MPH – In progress
2004-2005	Rima Dafer, MD	Transient Ischemic Attack: Adherence to Practice Guidleines	MPH - Completed

Resulted in one peer-reviewed journal publication [Yates (2002)] and multiple presentations in national conferences (Yates, Lassman, Spiese, Griffin, Richardson, and Elsinghorst).

Supervision of Postdoctoral fellows:

Year	Fellow Name	Area of Study
1993-95		Directed three Pediatric residents at the Wichita Campus with grant writing and analytical skills
1996-98	Debra Cherry, MD	Provided training and skills that enabled her to progress towards being an epidemiologist
1997-98	Chao Sun, MD	Cancer epidemiology
1997-99	E. Alanay, MD Alex Bailey, MD Doug Burton, MD Scott Cook, MD John Dunn, MD Sandy White, MD Cindy Teel, Ph.D.	Provided skills/training in data collection, research and manuscript writing for Orthopedic Surgery residents. This effort has resulted in four papers published in top ranked peer review journal, numerous abstract/paper presentations, and clinical awards
1999-02	Alex Bailey, MD Doug Burton, MD John Dunn, MD David Hicks, MD	Provided skills/training in data collection, research and manuscript writing for Orthopedic Surgery residents. This effort has resulted in four papers published in top ranked peer review journal, numerous abstract/paper presentations, and clinical awards
1998-00	Sarma Garimella, MBBS, MPH	Provided training and skills that enable him to progress towards being an epidemiologist
1998-00	Bela Satija, MBBS	Provided training and skills in the area of cancer registration and surveillance
1999-01	Chunqiao Tian, M.D.	Cancer epidemiology
2001	Carol Aguero, MD	Cancer epidemiology
2001-03	Paul Dew, MD, MPH	Quality of life in patients with cancers
2003-04	Soo Yeon Kwon, Ph.D.	Assessing outcomes in stroke patients
2002-04	James Guillory, DO, MPH	Birth outcomes in mothers receiving Medicaid
2005-06	Sofia Taboada, MD, MPH	Cardiovascular disease and metabolic syndrome

Resulted in 12 peer-reviewed journal publication [Kwon (2004, 2005), White (1999), Cook (2000, 2003), Burton (1999, 2000, 2001, 2002), Bader (2004),and Bailey (2001)], numerous presentations in national conferences (Kwon, Guillory, Garimella, White, Cook, Burton, and Bailey), national and international research awards (Burton, Kwon, and Garimella).

Served as Committee member (Thesis committee/student academic group/individual):

Date	Student or group name	Topic	Type of Student/group
1994-1995	Diane Harper, MD	The determination of human papillomavirus testing in the evaluation of an abnormal screening papanicolaou smear	MPH - completed
1995-1996	Denise Maldonado	Quantitative and qualitative associated with low birth weight among participating project eagle families	MPH - completed
1995-1996	Linda Moss	Non-Hodgkin's lymphomas in Kansas	MPH - transferred Emory University
1998-1999	Charles Gessert, MD	Factors associated with tube feeding using MDS data	MPH – completed
1998-1999	Janet Likert	Comparison of administrative claims data to medical record documentation in diabetic patients	MPH - completed
1999-2000	Susan Boger, Ph.D.	Antioxidant intake and ocular exposure to ocular exposure to solar radiation and risk for age-related macular degeneration	Ph.D. - completed
2002	Tori Van Culin, PT	A comparison of two global assessments of stroke recovery: the simple questions and the Modified Rankin Scale	MPH - completed
2002-2003	Catima Potter	Animal products, plant products, and their association with prostate cancer	MPH - completed
2003-2004	Mazen Bader, MD	Candidemia in patients with DM: Epidemiology and predictors of Mortality	MPH – completed
2003-2004	Katie Findlay, MD	A systematic review of including domestic violence related issues in medical school text books	MPH - completed
2004-	Tomas Griebling, MD	Predictors of Continence Recovery After Stroke	MPH – in progress
2004-2006	Vinutha Kumar, MD	Staphylococcus aureus bacteremia in elderly patients	MPH – in progress

Resulted in a NCI R01 grant [Harper], peer-reviewed publications [Bader (2005)], numerous presentations in local, regional, and national conferences [Haper, Moss, Gessert, Likert, Boger, VanCulin, Potter, Findlay]

General advising:

Date	Student or group name	Type of Student/group
1999 -2003	Irene Aga Aaron Lentz Paul Leahy Brian Trueworthy Kathrin Kusmann Katie Findlay	Med School students: Orr Academic Society
1999 -2001	Jeff Norvell	Medical school student
2000-2001	Norma Quintanilla, MD Paul Dew, MD Katie Findlay	MPH
1999 -2004	Julie Vu Kathrin Kusmann Katie Findlay Jennifer Koontz	Med School students: Orr Academic Society
2002-2003	Melanie Brown	Med School students: Orr Academic Society
2002-2003	Paul Dew, MD Monica Mattson Marcy Tarrants Norma Quintanilla, MD Katie Findlay	MPH students Received MD & MPH degrees in 2004
2004	Eric Bradstreet	Orr Academic Society
2004 -	Natalie Reed, MS	MS degree student
2005 -	Emily Bullard	MPH degree student

Educational materials (films, educational tapes, syllabi, educational Software packages, courses developed, Web courses)

Courses Developed:

Year	Title Description	Intended Audience
1994	PRVM 804 Principles of Statistics in Public Health	Graduate Students - MPH
1994	PRVM 802 Advanced Epidemiologic Methods	Graduate Students - MPH and faculty
1996	PRVM 836	Graduate Students - MPH and faculty

	Epidemiology in Aging	
1996	PRVM 871 Data Management and Descriptive Epidemiology Using SAS	Graduate Students - MPH
1997	PHCL 939/PTOX 939/P&O 939 Carcinogenesis and Cancer Biology (Two lectures in cancer epidemiology)	Graduate Students - Ph.D.
1997	PRVM 841 Advanced Epidemiologic Methods I	Graduate Students - MPH and faculty
1998	PRVM 842 Advanced Epidemiologic Methods II	Graduate Students - MPH. and faculty
1999	PHCL 939/PTOX 939/P&O 939 Carcinogenesis and Cancer Biology (Two lectures in cancer epidemiology)	Graduate Students - Ph.D.
1999	Short course: Central Cancer Registries - Design, Case Finding Mechanism, ICD-O-2 Coding, and Tumor Staging (co-developed with in-house staff)	Certified tumor registrars (CTR) Public health professionals Hospital registrars
1999-2000	Stroke Tool Box http://www.kumc.coa	Health Professionals
2000	PRVM836 Developed reading lists in two separate topics related to ageing research	MPH students and KU faculty
2001	PHCL939/PTOX939 Carcinogenesis and Cancer Epidemiology	Ph.D. Students & KU faculty
2001	Short course: Coding (ICD-O-3) and Collaborative Staging System (co-developed with in-house staff and staff from the National Cancer Registrars' Association)	Certified tumor registrars Hospital registrars
2002	Short course: Stroke Outcomes Assessment: Psychometric Properties of the Stroke Impact Scale	Neurologists and clinical nurses (used in workshops and meetings held nationally and internationally)
2003	PHCL939/PTOX939 Carcinogenesis and Cancer Epidemiology	Ph.D. Students & KU faculty
2004	NRSG754 Principles of Epidemiology and Study Design	Ph.D. Nursing students
2004	HSCA857	

	Risk Adjustment	Ph.D. and HSCA graduate students
2004	PRVM 802 Epidemiology Lab	MS and MPH students

Other teaching activities:

Date	Title	Place	Teaching function

Research and Scholarly Activities:

Brief statement of areas of research interest and current projects underway:

Research interest: My overall research interests are to provide leadership at the state and national levels in conducting cancer surveillance and identification of mechanisms toward cancer prevention and control; Development of outcomes measures in assessing stroke care as well as outcomes in patients with spine deformities. Specific areas of interest: chronic disease epidemiology (specifically, cancer and Neuroepidemiology), clinical trials, survival analysis, outcome assessments, and applied statistics. Individual research projects are briefly described below.

Current projects underway are:

A. *Kansas Cancer Registry & Cancer Surveillance* – In order to examine cancer burden in various regions of Kansas and evaluate effectiveness of cancer treatments for Kansans with cancer, a population-based cancer registry that ascertains Kansans with all types of cancer is a must. This grant proposal funded by CDC with a KDHE matching component was to conduct complete ascertainment of Kansans diagnosed with cancer in a timely fashion. As the Principal Investigator of this grant, my duties include management of 12 staff members including 2 MDs, 1 Ph.D, 3 Certified Tumor Registrars, 3 Master-Degree level statisticians, 1 Geographical Information Systems Specialist, 2 administrative assistants, and staff-shared with the Kansas Masonic Cancer Research Institute. This project worked with 135 hospitals, 44 pathology laboratories, 18 radiation treatment centers, 7 free-standing surgical centers, 5 major oncology clinics, and hundreds of physicians in private practice. Since the grant was first funded in 1994, the PI (Dr. Sue-Min Lai) has testified before the Senate and House to enact a cancer reporting law. With support from the Kansas Medical Society, American Cancer Society, and Kansas Pathology Association, and Kansas Hospital Association, this law was enacted in 1997 which ensures patients' confidentiality and at the same time streamlines cancer reporting in Kansas. Since then, the Kansas Cancer Registry has been awarded a GOLD certification for its completeness, timeliness, and data quality. Data from the Kansas Cancer Registry have been used in over 50 cancer cluster investigations lead by me as well as other epidemiologists both statewide and national. Because of my expertise in cancer cluster investigations and accomplishment as director of the Kansas Cancer Registry, I have been invited to testify before the U.S. President's Cancer Panel on behalf of rural Americans about cancer burden and the need for improvement. I was also invited to testify as an expert witness before the U.S. Senate Select Committee to address methods to conduct cancer cluster investigations. Cancer burden and cancer statistics are now published annually for the purpose of cancer planning, research, addressing the public's concerns, and policy making in Kansas. Because of the excellent data quality, data from the registry were included in the first ever published U.S. Cancer Statistics. Other publications using data from the registry include 10 technical reports, 2 peer-reviewed published articles, over 15 oral and abstract presentations in national and international conferences, and an editorship for the U.S. Colorectal Cancer Monograph.

The Kansas Cancer Registry is intended to be, and will continue as a vehicle for population-based cancer epidemiological studies. Several funded and not funded studies in collaboration with the Kansas Cancer Registry are briefly described below.

1. ***Pesticides and Risk for Prostate Cancer using the Geographic Information System, funded by CDC (PI: Sue-Min Lai, 2001-2004)*** **-** Using GIS technology to examine potential prostate cancer clusters in Kansas and investigate any relationship between pesticides exposure and risk for prostate cancer. Five presentations have been given at national and international conferences, 1 manuscript under review, and 2 manuscripts in preparation.

2. ***Reducing Ethnic and Racial Health Disparities, funded by Robert Wood Johnson Foundation (PI: Kim Kimminau, 2002-2003)*** – As part of this project, data from the Kansas Cancer Registry were used to identify disparities of cancer burden in Kansas.

3. ***Kansas Statewide Comprehensive Cancer Control Initiative, funded by CDC (PI: Paula Marmet, 2003-2007, Co-investigator – Sue-Min Lai)*** **-** Using the data collected from the Kansas Cancer Registry, a Kansas statewide comprehensive cancer control program has been initiated. This initiative involves all cancer related societies and associations, KDHE, Kansas hospitals including KUMC, CDC, and others. Five major cancer sites have been targeted for this control initiative in which I serve in the executive committee and as the spokesperson for efforts related to cervical cancer control and planning. The comprehensive cancer control initiative will include activities from prevention, to treatment, to pain control, and to end-of-life care.

4. **A new semi-automated method of grading breast carcinoma based on a multivariate analysis (PI: Ossama Tawfik; Co-investigator – Sue-Min Lai and others)** – This study examined predictability of a new histologic grading system (called KU grading system) by comparing this system to the SBR system in their ability to predict long term outcomes like survival and recurrence. Patients' outcome, follow-up data, and some tumor characteristics are obtained from the Kansas Cancer Registry. Manuscript is in preparation.

5. **Prognostic significance of ploidy, MIB-1 proliferation marker and P53 in renal cell carcinoma: A clinical-pathologic study**. **(PI: Ossama Tawfik; Co-investigator – Sue-Min Lai and others)** – This study utilizes clinical and follow-up data registered in the Kansas Cancer Registry to examine the ability of using ploidy, MIB-1 proliferation markers, and P53 to predict the long-term prognosis for patients with renal cell carcinoma. The project is underway.

6. **Comparison of cost in the treatment of advanced oropharyngeal squamous cell carcinoma (PI: Derrick Wallace; Consultant: Sue-Min Lai)** – This is a chart review study to compare the survivorship and costs of different treatment modalities in subjects with advanced squamous cell carcinoma. The study utilized data from the Kansas Cancer Registry to identify participating patients' short- and long-term survivorship. Manuscript is in preparation.

B. ***Stroke Impact Scale*** **-** The Stroke Impact Scale was developed to quantify impact of stroke on impairment, disability, and quality of life. The instrument is the only scale that is validated to comprehensively assess stroke impact from the perspectives of patients, care givers, and health care professionals including neurologists, neurosurgeons, and rehabilitation specialists. This scale was subsequently patented under KUMC in 1999 and is currently being used in a multitude of international clinical drug trials and has become one of the outcome measures used by physicians for patient care. A recent grant from Glaxo/SmithKline (described below) is to demonstrate the value of using the Stroke Impact Scale as the primary outcome measure in acute stroke trials. The proposal is currently being reviewed by FDA. This scale has been translated into the following languages: Australian English, Austrian German, Belgian Dutch, Belgian French, Canadian French, Danish, Dutch, French, German, Italian, Japanese, Norwegian New Zealand English, Portuguese, Spanish, Swedish, and UK English.

C. ***Kansas Claude D. Pepper Older Americans Independence Center Grant: Stroke Epidemiology, Recovery, and Development*** **-** The center grant was to study factors affecting stroke in elderly persons, and to conduct basic and clinical research on ways for elderly Americans to lead more independent life styles for as long as

possible. Six core projects constituted the center grant. I was the P.I. of a core that examined epidemiology of stroke recovery through establishment of a Kansas City wide stroke registry. The registry recruited patients from 18 hospitals in the Kansas City area. The Kansas City Stroke Registry has also provided patients for two NIH funded intervention trials, a stroke study funded by the American Heart Associations, and for KUMC investigators who have no access to stroke populations for their studies. In addition, as the stroke epidemiologist, I also provided mentorship to faculty and researchers in the areas of aging epidemiological research.

D. *Idiopathic Scoliosis and Spine Deformities* - To study epidemiology of scoliosis and spine deformities, as well as their short- and long-term outcomes after spine instrumentation. The Scoliosis Research Society – 22 (SRS-22) was developed and refined for evaluating surgical outcomes in both pediatric and adult patients. The SRS-22 was officially adopted by the Scoliosis Research Society to be the outcome measure for patients with scoliosis. This outcome scale has been translated into Spanish, Hebrew, Turkish, Chinese, and Japanese. The long term goal of a series of related projects in scoliosis and spine deformities is to identify optimal treatment strategies that orthopedic surgeons can adopt in their daily practice to improve morbidities and mortality resulting from treatment modalities and to enhance patients' quality of life. To fulfill this long-term goal, discussion with major orthopedic surgery centers in the nation is underway to pull patients from all centers together to maximize the statistical power that is required to test a series of hypothesis using a standardized design with uniform criteria for patient recruitment and data collection.

Past projects were:
Prostate cancer in rural medically underserved areas – identified prostate cancer burden in rural Kansas and ascertained accuracy of prostate cancer diagnosis. Results have been presented to the U.S. President's Cancer Panel and included in the U.S. Congressional Report.

Lehigh Valley, Pennsylvania Recurrent Stroke Study: Identified risk factors associated with stroke recurrence and also studied effects of risk factor(s) control on stroke recurrence. Nineteen peer-reviewed papers have been published and over fifty oral and poster presentations have been done.

Characterizing measures of stroke outcomes - examined sensitivity, specificity, and validity of various instruments that are commonly used to assess stroke recovery. Sensitivity to change of these instruments was also tested using stroke patients from the Kansas City Stroke Study.

Evaluation of Proxy Responses to the Stroke Impact Scale - evaluated proxy responses to the Stroke Impact Scale and also examined reliability of this instrument using telephone interview**.** This project is critical in stroke care because a great percentage of stroke patients are too severe to participate in ongoing acute stroke trials. Examining validity and reliability of proxy responses to the Stroke Impact Scale allowed us to include severe stroke patients using proxy responses in therapeutic trials and thus generalize drug efficacy to those severe stroke patients who would never have had a chance to be put on various neuroprotective therapies.

Grant and contract support: (Information must include whether the nominee is the principal investigator or a co-investigator, names of all investigators, title of grant, funding source, dollar amount in direct costs, and years during which grant applies. Please describe in sufficient detail your contribution as co-investigator.)

Previous grants:

Principal Investigator	***Investigators***	***Title of Grant***	***Funding Source***	***Total Costs***	***Years***
Norge Jerome		*Proposal To Provide*	KDHE	$ 59,642	1/94-95

Sue-Min Lai		*A Kansas Statewide Needs Assessment That Is Consistent With The MCH Block Grant Requirements*			
Pamela Duncan Sue-Min Lai	Stephanie Studenski	*Characterizing Measures of Stroke Outcomes*	Glaxo-Wellcome	$176,637	7/95-6/96
John Neuberger	Tom Piece Sue-Min Lai	*Cancer Cluster Investigation in a School District*	Raytown Consolidated School District, No. 2	$23,546	7/96-12/96
Sue-Min Lai		*Cancer Information Dissemination*	American Cancer Society	$10,000	1/95-2/95
Pamela Duncan	Sue-Min Lai Stephanie Studenski Dennis Wallace	*Development of a Stroke Specific Measure*	Glaxo-Wellcome	$319,499	7/97-4/99
Pamela Duncan	Sue-Min Lai Stephanie Studenski *Dallas Johnson*	*Evaluating sensitivity to change of stroke outcome measures*	Veterans Administration	$596,800	7/97-4/00
Sue-Min Lai		*Record Linkage Studies Utilizing Resources in Population-based Tumor Registries*	NCI Master Agreement	No cost	7/94 - /00
Sue-Min Lai		*Kansas Cancer Registry & Cancer Surveillance*	CDC & KDHE	$ 3,657,241	10/94-/00
Sue Min Lai	Brantley Thrasher	*Prostate cancer in rural medically underserved areas*	CDC	$ 209,422	1/00-9/01
Pam Duncan	Sue-Min Lai	*Evaluation of Proxy Responses to the Stroke Impact Scale*	AHA	$ 358,725	1/99-12/01
Sue-Min Lai		*Cancers in nursing home residents*	CDC	$ 126,040	7/01-6/02
Sue-Min Lai		*Kansas Cancer Registry & Cancer*	CDC & KDHE	$ 1,178,650	7/00-6/02

		Surveillance			
Sue-Min Lai		*Stroke recovery, Epidemiology, and Recruitment*	National Institute of Aging	$ 850,000	1/98-12/03 (2003 no cost extension)

A core grant of the Claude D. Pepper Older Americans Independent Center (total center grant award: $ 7,600,000)

Dennis Wallace Sue-Min Lai (Co-PI)		*Research analysis & biostatistical support*	National Institute of Aging	$ 700,000	1/98-12/03 (2003 no cost extension)

A core grant of the Claude D. Pepper Older Americans Independent Center (total center grant award: $ 7,600,000)

Sue-Min Lai		*Infant mortality & Morbidity – validation Of Vital Statistics and Medicaid*	KDHE	$ 20,000	7/02-6/03
Sue-Min Lai	Brantley Thrasher	*Pesticides & risk for prostate cancer using GIS technology*	CDC/ATPM	$ 450,000	4/01 - 12/04
Pamela Duncan Dean Reker	Sue Min Lai Stephanie Studenski	*Measuring health related quality of life in veterans with stroke*	VA	$ 438,300	3/01 - 2/04
Sue-Min Lai		*Examination of the Agreement btw the SIS-16 & SIS-16 extracted from SIS*	Glaxo/ SmithKline	$ 28,050	4/03-3/04

Current grants:

Principal Investigator	***Investigators***	***Title of Grant***	***Funding Source***	***Total Costs***	***Years***
Sue-Min Lai	n/a	*Kansas Cancer Registry & Cancer Surveillance*	CDC & KDHE	$3,712,945	7/02-6/07

Supervision of a team of 12 members including two physicians, four master's degree level statisticians, one master's degree level epidemiologist, one master's degree level programmer, three Certified Tumor Registrars (CTR), and one research assistant.

Sue-Min Lai	Edward Ellerbeck	Cardiovascular Health Examination Survey in Kansas	CDC	$ 497,288	9/05-8/07

Pending grants

Principal Investigator	***Investigators***	***Title of Grant***	***Funding Source***	***Total Costs***	***Years***

None

Full length, peer-reviewed articles in scientific journals: (Provide names of all authors, year, title, journal, volume, and inclusive pages. List in chronological order.)

Articles already published:

1. Sobel E, Zhang Z, Alter M, **Lai SM**, Davanipour Z, Friday G, McCoy R, Isack T, Levitt L. Stroke in the Lehigh Valley: Seasonal variation in incidence rates, *Stroke.* 1986;18(1):38-42.

2. Alter M, Zhang Z, **Lai SM**, LaRue L. Does delay in childhood infections increase risk of multiple sclerosis? *Ital J Neurology.* 1987;1:23-31.

3. Alter M, Zhang XZ, Davanipour Z, Sobel E, **Lai SM**, LaRue L. Does delay in acquiring childhood infection increase risk of multiple sclerosis? *Ital J Neurol Sci.* 1987;8:73-74.

4. LaRue L, Alter M, **Lai SM**, Friday G, Sobel E, Levitt L, Isack T. Acute stroke, hematocrit and blood pressure. *Stroke.* 1987;18:565-569.

5. **Lai SM**, Zhang ZX, Alter M, Sobel E. World-wide trends in multiple sclerosis mortality. *Neuroepidemiology.* 1989; 8:56-67.

6. Friday G, **Lai SM**, Alter M, Sobel E, LaRue L, McCoy RL, Levitt LP, Isack T, Gil-Peralta AG. Stroke in the Lehigh Valley: Racial/ethnic differences. *Neurology.* 1989;39:1165-1168.

7. **Lai SM**, Alter M, Friday G, Gil-Peralta A, McCoy RL, Levitt LP, Isack T. Transient ischemic attacks: Their frequency in the Lehigh Valley. *Neuroepidemiology.* 1990;9:124-130.

8. Gil-Peralta A, Alter M, **Lai SM**, Friday G, Otero A, Katz ML, Comerota A. Duplex Doppler and spectral flow analysis of racial differences in cerebrovascular atherosclerosis. *Stroke.* 1990;21:740-744.

9. Alter M, **Lai SM**, Tournier B, Gil-Peralta A, Friday G, Powers F, Sterman A. Acute stroke trials: Reasons for patient withdrawal. *J Stroke Cerebrovasc Dis.* 1991;1:182-189.

10. Alter M, **Lai SM**, Friday G, Sobel E, Toedter L. Aspirin, Warfarin and recurrent stroke. [Letter] *Lancet.* 1991;337:1343.

11. Vonderheid EC, Diamond LW, **Lai SM**, Au F, Dellavecchia MA. Lymph node histopathologic findings in cutaneous T-cell lymphoma: A prognostic classification system based on morphologic assessment. *Am J Clin Pathol.* 1992;97:121-129.

12. Pickering N, Alter M, **Lai SM**, Haberman R, Sobel E, Friday G. Cardiac arrhythmias: A predictor of recurrent stroke and death after initial stroke. *J Neuroepidemiology.* 1992;11:2-4.

13. Alter M, Friday G, Sobel E, **Lai SM.** Risk factors for stroke recurrence: Study method, design in the Lehigh Valley. *Neuroepidemiology.* 1993; 12:241-248.

14. Vonderheid E, Diamond LW, Van Vloten WA, Scheffer E, Meijer CJLM, Cashell AW, Hardman JM, **Lai SM**, Hermans J, Matthews MJ. Lymph node classification systems in cutaneous T-cell lymphoma and evidence for the utility of the working formulation of non-Hodgkin's lymphomas for clinical usage. *Cancer.* 1994;73:207-218.

15. **Lai SM**, Alter M, Friday G, Sobel E. A multifactorial analysis of risk factors for recurrence of ischemic stroke. *Stroke.* 1994;25:958-962.

16. Alter M, Friday G, **Lai SM**, O'Connell J, Sobel E. Hypertension and risk of stroke recurrence. *Stroke.* 1994;25:1605-1610.

17. **Lai SM**, Alter M, Friday G, Sobel E. Prognosis for survival after an initial stroke. *Stroke.* 1995;26:2011-2015.

18. Alter M, **Lai SM**, Friday G, Singh V, Kumar VM, Sobel E. Stroke recurrence in diabetics: Does control of blood glucose reduce risk? *Stroke.* 1997;28:1153-1157.

19. Friday G, Alter M, **Lai SM**, Sobel E. Transient ischemic attack and risk of stroke recurrence. *J Stroke & Cerebrovascular Dis.* 1997;6(6):410-415.

20. Duncan PW, **Lai SM.** Stroke recovery. *Top Stroke Rehabil.* 1997;4(3):51-58.

21. Neuberger JS, Pierce JT, **Lai SM.** Cancer cluster investigation in a school district. *J Sch Health.* 1997;67(9):380-383.

22. **Lai SM**, Alter M, Friday G, Lai SL, Sobel E. Disposition after acute stroke: Who is not sent home from the hospital? *Neuroepidemiology.* 1998;17 (1):21-29.

23. **Lai SM**, Duncan PW, Keighley J. Prediction of functional outcome after stroke: Comparison of the Orpington Prognostic Scale and the NIH Stroke Scale. *Stroke.* 1998;29: 1838-1842.

24. Duncan PW, Wallace D, **Lai SM**, Johnson D, Embretson S, Laster L. The Stroke Impact Scale Version 2.0: Evaluation of reliability, validity, and sensitivity to change. *Stroke.* 1999;30:2131-2140.

25. Burton DC, Asher MA, **Lai SM.** The selection of fusion levels using torsional correction techniques in the surgical treatment of idiopathic scoliosis. *Spine.* 1999;24(16):1728-1739.

26. **Lai SM**, Alter M, Friday G, Lai SL, Sobel E. Stroke survival after discharge from an acute-care hospital. *Neuroepidemiology.* 1999;18(4):210-217.

27. **Lai SM**, Duncan PW. Evaluation of the American Heart Association stroke outcome classification. *Stroke.* 1999;30:1840-1843.

28. White SF, Asher M, **Lai SM**, Burton DC. Patients' perceptions of their overall function, pain and appearance following primary posterior instrumentation and fusion for idiopathic scoliosis. *Spine.* 1999;24(16):1693-1700.

29. Duncan PW, **Lai SM**, Van Culin V, Huang L, Clausen D, Wallace D. Development of a comprehensive assessment toolbox for stroke in *Clinics in Geriatric Medicine.* 1999, W.B. Saunders Company. pp 885-915.

30. Burton DC, Asher M, **Lai SM.** Scoliosis correction maintenance in skeletally immature patients with idiopathic scoliosis: Is anterior fusion really necessary? *Spine.* 2000;25:61-68.

31. Cook SM, Asher MA, **Lai SM**, Shobe J. Reoperation after primary posterior instrumentation and fusion for idiopathic scoliosis. *Spine*. 2000;25:463-468.

32. Duncan PW, **Lai SM**, Keighley J. Defining post-stroke recovery: Implications for design and interpretation of drug trials. *Neuropharmacology.* 2000;39:835-841.

33. Asher M, **Lai SM**, Burton D. Further development and validation of the Scoliosis Research Society (SRS) Outcomes Instrument. *Spine;* 2000;25:2381-2386.

34. Patel A, Duncan PW, **Lai SM**, Studenski S. The relationship between impairments and functional outcomes post stroke. *Arch Phys Med Rehabil*. 2000;81(10):1357-1563.

35. **Lai SM**, Duncan PW. Stroke Recovery Profile and the Modified Rankin Assessment. *Neuroepidemiology*. 2001;20(1):26-30.

36. Teel CS, Duncan PW, **Lai SM**. Caregiving experiences after stroke. *Nursing Research*. 2001;50(1)53-60.

37. Duncan PW, Wallace D, Studenski S, **Lai SM**, Johnson D. Conceptualization of a new stroke specific outcome measure: The Stroke Impact Scale. *Topics in Stroke Rehabilitation.* 2001;8(2):19-33.

38. Studenski S, Wallace D, Duncan PW, Rymer M, **Lai SM**. Predicting stroke recovery: Three and six-month rates of patient-centered functional outcomes based on the Orpington Prognostic Scale. *J Am Geriatr Soc.* 2001;49:308-312.

39. Rigler SK, Webb MJ, Patel AT, **Lai SM**, Duncan PW. Use of antihypertensive and antithrombiotic medications after stroke in community-based care. *Ann Pharmacother.* 2001;35:811-816.

40. Asher M, Cook S, **Lai SM**. Late operative site pain with Isola posterior instrumentation requiring removal: infection or metal reaction? *Spine*. 2001;26(14)E308-E313.

41. Bailey AS, Adler F, **Lai SM**, Asher MC. A comparison between bipedal and quadripedal rats: Do bipedal rats actually assume an upright posture? *Spine.* 2001;26(14):E308-E313.

42. Wallace D, Duncan PW, **Lai SM**. Comparison of the responsiveness of the Barthel Index and Functional Independence Measure in stroke: The impact of using different methods for measuring responsiveness. *J Clin Epidemiol.* 2002;55:922-928.

43. Yates JS, **Lai SM**, Duncan PW, Studenski S. Falls in community dwelling stroke survivors: An accumulated impairments model. *J Rehabil Res and Development*, 2002;39(3):385-394.

44. Friday G, Alter M, **Lai SM**. Control of hypertension and risk of stroke recurrence. *Stroke.* 2002;33:2652-2657.

45. **Lai SM**, Studenski S, Duncan PW. Persisting consequences of stroke measured by the Stroke Impact Scale. *Stroke.* 2002;33:1840-1844.

46. **Lai SM**, Duncan PW, Keighely J, Johnson D. Depressive symptoms and independence in BADL and IADL. *J Rehabil Res Dev*. 2002;39(5):589-596.

47. Burton DC, Asher MA, **Lai SM**. Patient-based outcomes analysis of patients with single torsion thoraclumbar-lumbar scoliosis treated with anterior or posterior instrumentation: an average 5- to 9-year follow-up study. *Spine.* 2002;27(21):2363-2367.

48. Duncan PW, **Lai SM**, Tyler D, Perera S, Reker DM, Studenski S. Evaluation of Proxy Responses to the Stroke Impact Scale. Stroke. 2002;33:2593-2599.

49. Bailey A, Adler F, Lai SM, Asher M. A comparison between bipedal and quadripedal rats. Stud Health Technol Inform. 2002;88:15-16. (Review)

50. Asher M, **Lai SM**, Burton D, Manna B. Spine deformity correlates better than trunk deformity with idiopathic scoliosis patients' quality of life questionnaire responses. Stud Health Technol Inform 2002;91:462-464.

51. Pohl PS, Duncan PW, Perera S, Wen W, **Lai SM**, Studenski S, Long J. Influence of stroke-related impairments on performance in 6-minute walk test. *J Rehabil Res and Development.* 2002;39(4):439-444.

52. Asher M, **Lai SM**, Burton D, Manna B. Trunk deformity correction stability following posterior instrumentation and arthrodesis for idiopathic scoliosis. Stud Health Technol Inform 2002;91:469-472.

53. Asher M, **Lai SM**, Burton D, Manna B. The reliability and concurrent validity of the Scoliosis Research Society - 22 patient questionnaire for idiopathic scoliosis. *Spine.* 2003;28(1):63-69.

54. Asher M, **Lai SM**, Burton D, Manna B. Discrimination validity of the Scoliosis Research Society-22 patient questionnaire: Relationship to idiopathic scoliosis curve pattern and curve size. *Spine.* 2003;28(1):74-78.

55. Asher M, **Lai SM**, Burton D, Manna B. Scoliosis Research Society-22 patient questionnaire responsiveness to change associated with surgical treatment. *Spine*. 2003;28(1):70-73.

56. Duncan PW, **Lai SM**, Bode RK, Perera S, DeRosa JT. Stroke Impact Scale – 16: A brief assessment of physical function. *Neurology*. 2003;60:291-296.

57. **Lai SM**, Perera S, Duncan PW, Bode R. Physical and social functioning after stroke: comparison of the Stroke Impact Scale and short form-36. *Stroke.* 2003;34(2):488-493.

58. Cook S, Asher MA, Carson WL, **Lai SM**. Effect of transverse connector design on development of late operative site pain: Preliminary clinical findings. *ASTM STP.* 2003;1431:47-54.

59. Parmigiani G, Ashih HW, Samsa GP, Duncan PW, **Lai SM**, Matchar DB. Cross-calibration of stroke disability measures: Bayesian analysis of longitudinal ordinal categorical data using negative dependence. *Journal American Statistical Association*. 2003;98(462):273-281.

60. Duncan PW, Bode RK, **Lai SM**, Perera S. Rasch analysis of a new stroke specific outcome scale: The Stroke Impact Scale. *Arch Phys Med Rehabil*. 2003;84(7):950-963.

61. Duncan PW, Studenski S, Richards S, Gollub S, **Lai SM**, Reker D, Perera S, Yates J, Koch V, Rigler S, Johnson D. Randomized clinical trial of therapeutic exercise in sub acute Stroke. *Stroke.* 2003;34:2173-2180.

62. **Lai SM**, Gray J, Garimella S, Keighley J, Murphy P. Digital document management – There is far more to it than meets the eyes. *J Registry Management.* 2003;30(4):123-126.

63. Yates JS, Studenski S, Gollub S, Whitman R, Perera S, **Lai SM**, Duncan PW. Bicyle ergometry in subacute stroke survivors: Feasibility, safety, and exercise performance. Journal Aging and Physical Activity. 2004;12(1):64-74.

64. Studenski S, **Lai SM**, Duncan PW, Rigler S. The impact of self-reported cumulative comorbidity on stroke recovery. Age Aging. 2004;33(2):195-198.

65. Asher M, **Lai SM**, Burton D, Manna B. The influence of spine and trunk deformity on preoperative idiopathic scoliosis patients' health related quality of life questionnaire responses. Spine. 2004;29(8):861-868.

66. Kwon S, Hartzema AG, Duncan PW, **Lai SM**. Disability measures in stroke. Relationship among the Barthel Index, the Functional Independence Measure, and the Modified Rankin Scale. Stroke. 2004;35:918-923.

67. Asher M, **Lai SM**, Burton D, Manna B. Maintenance of trunk deformity correction following posterior Instrumentation and arthrodesis for idiopathic scoliosis. Spine. 2004;29(16):1782-1788.

68. Asher M, **Lai SM**, Burton D, Manna B, Cooper A. Safety and efficacy of Isola instrumentation and arthrodesis for adolescent idiopathic scoliosis: 2 to 12 year follow-up. Spine. 2004;29(18):2013-2023.

69. **Lai SM**, Garimella S, Keighley J. Pathology and Dermatology Reports: Key in completeness of melanoma cancer reporting in population-based cancer registries. J Registry Management. 2004;31(3):87-91.

70. Bader MS, **Lai SM**, Kumar V, Hinthorn D. Candidemia in patients with diabetes mellitus: Epidemiology and predictors of mortality. Scand J Infect Dis. 2004, 36(11-12):860-865.

71. Duncan PW, Reker D, Kwon S, **Lai SM**, Studenski S, Perera S, Alfrey C, Marquez J. Measuring quality of life with SIS: Comparison of telephone vs. mail administration in veterans with stroke. Medical Care. 2005;43(5):507-515.

72. **Lai SM**, Duncan PW, Dew P, Keighley J. Sex differences in stroke recovery. Prev Chronic Dis. 2005 Jul;2(3):1764-1770. Epub 2005 Jul 21.

73. Studenski S, Duncan PW, Perera S, Reker D, **Lai SM**, Richards L. Daily functioning and quality of life in an RCT of therapeutic exercise for subacute stroke survivors. Stroke. 2005;36(8):1764-1770.

74. Bader MS, Hinthorn D, **Lai SM**, Ellerbeck EF. Hyperglycaemia and mortality of diabetic patients with candidemia. Diabet Med. 2005;22(9):1251-2157.

75. **Lai SM**, Shen Z, Rushton G. Factors contributing to unsuccessful geocoding in a population-based cancer registry. J Registry Management. 2005;32(4):169-174.

76. **Lai SM,** Studenski S, Richards L, Perera S, Reker D, Rigler S, Duncan. Therapeutic exercise and depression after stroke. J Am Geriatr Soc. 2006;54:240-247.

77. **Lai SM**, Asher M, Burton D. Estimating SRS-22 quality of life measures with SF-36: Application in idiopathic scoliosis. Spine. 2006;31:473-478.

78. Kwon S, Duncan PW, Studenski S, Perera S, **Lai SM**, Reker D. Measuring stroke impact with SIS: Construct validity of SIS telephone administration. Qual of Life Res. 2006;15:367-376.

79. Asher M, **Lai SM,** Glattes C, Burton DC, Alanay A, Bago J. Refinement of the SRS-22 health-related quality of life questionnaire function domain. Spine. 2006;31:593-597.

80. Dubinsky R, **Lai SM**. Mortality of stroke patients treated with thrombolysis: Analysis of nationwide inpatient sample. Neurology. 2006;66:1742-1744.

81. Jackson-Thompson J, Ahmed F, German RR, **Lai SM**, Friedman C. Descriptive epidemiology of colorectal cancer in the United States, 1998-2001. Cancer. 2006 Sep 1;107(5 Suppl):1103-11.

82. Reed E, Ahmed F, Jackson-Thompson J, Friedman C, German RR, **Lai SM**, Wingo PA. Foreword: Promoting the use of registry-based national cancer surveillance data for colorectal cancer prevention and control. Cancer. 2006 Sep 1;107(5 Suppl):1101-02.

83. **Lai SM**, Zhang KB, Uhler RJ, Harrison JN, Clutter GG, Williams MA. Geographic variation in the incidence of colorectal cancer in the United States, 1998-2001. Cancer. 2006 Sep 1;107(5 Suppl):1172-80.

84. Dubinsky R, Chen J, **Lai SM**. Trends in hospital utilization and outcome for patients with ALS: Analysis of a large US cohort. Neurology. 2006 Sep 12;67(5):777-780.

85. Glattes C, Asher M, Burton D, **Lai SM**. Correction of the angle of trunk inclination utilizing apical wiring techniques and concave rib osteotomy in adolescent idiopathic thoracic scoliosis. Stud Health Technol Inform. 2006;123:321-326.

86. Dubinsky RM, **Lai SM**. Mortality from combined carotid endarterectomy and coronary artery bypass surgery in the US. Neurology. 2007 Jan 16;68(3):195-197.

Manuscripts in press: (Provide names of all authors, title, journal, and photocopy of manuscript and letter of acceptance from journal editor.)

1.

Manuscripts submitted but not yet accepted: (Provide names of all authors, title, journal, and photocopy and letter acknowledging receipt of manuscript by journal.)

1. **Lai SM**, Shen Z, Banks D. ZIP Code Tabulation Area: An alternate unit of analysis for cluster investigation. Int J Hlth Geo. 2005.

2. Woodbury ML, Velozo CA, Richards LG, Duncan PW, Studenski S, **Lai SM**. Dimensionality and construct validity of the Fugl-Meyer Upper Extremity Assessment. Arch Phys Med and Rehabil. 2006.

3. Rudolph C Glattes, Burton DC, **Lai SM**, Frasier E, Asher MC. The reliability and concurrent validity of the Scoliosis Research Society-22r Patient Questionnaire Compared with the Child Health Questionnaire-CF87 Patient Questionnaire for adolescent spinal deformity. Spine, 2006.

Other scholarly publications (including Technical Reports and Letters to Editor):

1. Jerome JW, **Lai SM**, Jackson JL, Rall M. Materal and Child Health Needs Assessment for the state of Kansas. Tech Report #7, Community Nutrition Division, KUMC, 1995.

2. **Lai SM** and KCR investigators. 1995 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 1997.

3. **Lai SM** and KCR investigators. 1996 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 1998.

4. **Lai SM** and KCR investigators. 1997 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 1999.

5. Duncan PW, Stiers W, Studenski S, Rondinelli R, Teel C, **Lai SM**, Rymer M. Characterizing measures of stroke rehabilitation outcomes. Rehabilitation R & D Progress Report, Department of Veterans' Administration, 1999

6. ***Lai SM*** and KCR investigators. 1998 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2000.

7. Asher M, Cook S, **Lai SM**. Late operative site pain with Isola posterior instrumentation requiring removal: infection or metal reaction? [Letter] *Spine.* 2001;26(22):2516-2517.

8. ***Lai SM*** and KCR investigators. 1999 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2001.

9. ***Lai SM*** and KCR investigators. 2000 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2002.

10. ***Lai SM*** and KCR investigators. 2001 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2003.

11. ***Lai SM*** and KCR investigators. 2002 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2004.

12. ***Lai SM*** and KCR investigators. 2003 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2005.

13. ***Lai SM*** and KCR investigators. 2004 Kansas Cancer Registry Annual Report - Cancer Incidence and Mortality in Kansas, 2006.

Books and book chapters: (Provide names of all authors, year, book title, chapter title, edition, publisher, and pages. If in press, provide documentation.)

1. **Lai SM**, Asher M, Burton D, Manna B. International Research Society of Spine Deformities Symposium. Adolescent idiopathic scoliosis assessment: Generic vs. disorder specific health related quality of life (HRQL) questionnaire. In: Sawatzky BJ (ed.), International Research Society of Spine Deformities, British Columbia, Vancouver, 2004. pp:124-127.

2. Asher M, **Lai SM**, Burton D, Manna B, Cooper A. International Research Society of Spine Deformities Symposium. Safety and efficacy of Isola Instrumentation and arthrodesis for adolescent idiopathic scoliosis: 2 to 12 year follow-up. In: Sawatzky BJ (ed.), International Research Society of Spine Deformities, British Columbia, Vancouver, 2004. pp: 402-405.

Published abstracts: (Provide names of all authors, year, title, where published, volume, and pages.)

1. **Lai SM**, Alter M, Friday G, Van Brackle W, et al. Hospital admissions for transient attacks. *Neurology* 38:311, 1988.

2. Alter M, **Lai SM**, Friday G, Brandspeigel H, Sobel E, VanBrackle W, Levitt LP, McCoy R, Isack T. Stroke after transient ischemic attack. *Neurology* 38:311, 1988

3. **Lai SM**, Zhang ZX, Alter M. World-wide mortality trends in multiple sclerosis: A 20 year study. *Neuroepidemiology* 7:49, 1988.

4. Friday G, Brown P, Colmenares J, Alter M, **Lai SM**. Left ventricular hypertrophy and risk of intracerebral hemorrhage. *Annals of Neurology* 28;2:259, August 1990.

5. **Lai SM**, Alter M, Friday F. Congestive heart failure, myocardial infarction, and risk of recurrent stroke. *Neuroepidemiology* 14:11, 1995.

6. **Lai SM**, Duncan PW, Keighley J, Studenski S. Prognostic ability of Orpington Prognostic Scale and NIH stroke scale. *Stroke* 29(1):318, 1998.

7. Duncan PW, **Lai SM**, Keighley J, Rymer M. Time to medical attention after a mild or moderate acute stroke. *Stroke* 29(1);312, 1998.

8. Asher MA, Cook SM, **Lai SM**, Shobe J. Late operative site pain (LOSP) following primary posterior instrumentation and fusion for idiopathic scoliosis. *Orthopedic Associations of the English Speaking World 10th Combined Meeting, February 1998, Auckland, New Zealand*. p 49.

9. Duncan PW, Wallace D, **Lai SM**, Studenski S. Development of a stroke specific outcomes scale. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998,

10. Duncan PW, Wallace D, **Lai SM**, Studenski S. Development of a stroke specific outcomes scale. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998, Washington DC. Proceedings - p117.

11. **Lai SM**, Duncan PW, Keighley J. Prognostic ability of Orpington Prognostic Scale and NIH Stroke Scale. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998, Washington DC. Proceedings - p151.

12. Duncan PW, **Lai SM**, Keighley J, Rymer M. Time to medical attention after a mild or moderate acute stroke. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998, Washington DC. Proceedings - p152.

13. Duncan PW, **Lai SM**, Wallace D. Reliability and validity of a new stroke outcome scale. *Stroke* 30(1), 1999.

14. **Lai SM**, Duncan PW, Keighley J. Stroke related impairments and quality of life. *Stroke* 30(1), 1999.

15. Friday G, Alter M, **Lai SM**, Bigelow C. Control of hypertension and risk of stroke recurrence: How low should it go? *Stroke* 31(1), 2000:288.

16. Duncan PW, **Lai SM**, Johnson D. Sensitivity to change of SF-36 summary scores. *Stroke* 31(1):291, 2000.

17. **Lai SM**, Duncan PW, Keighley J. Depression and stroke recovery. *Stroke* 31(1):292, 2000.

18. **Lai SM**, Duncan PW, Johnson D, Wallace D. Sensitivity to change of post-stroke health status assessments. *Stroke* 31(1):302, 2000.

19. Wallace D, Duncan PW, **Lai SM.** Are the FIM motor scale and Barthel index responsive to stroke recovery? *Stroke* 31(1):301, 2000.

20. Wallace D, Duncan PW, **Lai SM.** The Stroke Impact Scale, a sensitive and consistent measure of stroke recovery. *Stroke* 31(1):302, 2000.

21. Duncan PW, Harrison DJ, **Lai SM**, Cook SF, Rymer MM. Factors affecting elapsed time between acute stroke and presentation. *Stroke* 31(1):308,2000.

22. Asher MA, Cook SM, **Lai SM**, Shobe J. Late operative site pain (LOSP) following primary posterior instrumentation and fusion for idiopathic scoliosis. *J Bone Joint Surg [BR]* 2000:82-B:SUPP II, 151.

23. **Lai SM**, Studenski S, Duncan PW, Perera S. Discriminant validity of the Stroke Impact Scale. *Stroke*. 2000;32:361-c.

24. **Lai SM**, Duncan PW, Tyler DA, Studenski S. Reliability of self-reported pre-stroke function. *Stroke.* 2000;32:363-c.

25. Duncan PW, Wallace D, **Lai SM**, Tyler D. Comparison of patient and proxy responses to the Stroke Impact Scale. *Stroke*. 2000;32:379-d.

26. Asher M, Manna B, **Lai SM**, Lark R. Trunk asymmetry correction following torsional spinal instrumentation for thoracic idiopathic scoliosis. *Scoliosis Research Society*. 2000:35:153

27. Asher M, **Lai SM.** End and adjacent vertebra alignment of instrumented Scheuermann's hyperkyphosis. *Scoliosis Research Society*. 2000:35:153

28. Bailey A, Adler F, **Lai SM**, Asher M. A comparison between bipedal and quadripedal rats. Do bipedal rats actually assume an upright posture? *Scoliosis Research Society*. 2000:35:154

29. **Lai SM**, Studenski S, Duncan PW, Perera S. Discriminant validity of the Stroke Impact Scale. *Stroke* 2001:32:363.

30. Duncan PW, Wallace D, **Lai SM**, Tyler D. Comparison of patient and proxy responses to the Stroke Impact Scale. *Stroke* 2001:32:379

31. **Lai SM**, Studenski S, Duncan PW, Perera S. Discriminant validity of the Stroke Impact Scale. *Stroke* 2001:32:361.

32. **Lai SM**, Duncan PW, Bode R. Comparison of the SIS-16 versus the Barthel Index: A secondary analysis of the GAIN Americas Study. *Neurology* (Suppl 3) 2001;56(8):A103.

33. Duncan PW, **Lai SM**, Bode R. Validation of the Stroke Impact Scale using data from the GAIN Americas Trial. *Neurology* (Suppl 3) 2001;56(8):A171.

34. Dubinsky RM, Tyler D, Perera S, Duncan P, **Lai SM**. Driving after stroke: Effects of severity and advice on driving. *Neurology* (Suppl 3) 2001;56(8):A163.

35. Asher M, **Lai SM**, Burton D, Manna B. The reliability and concurrent validity of the SRS-22 patient questionnaire for idiopathic scoliosis. *Scoliosis Research Society* 2001;36:101.

36. Asher M, **Lai SM**, Burton D, Manna B. Discrimination validity of the Scoliosis Research Society-22 patient questionnaire: Relationship to idiopathic scoliosis (IS) curve pattern and curve size. *Scoliosis Research Society* 2001;36:102.

37. Asher M, **Lai SM**, Burton D, Manna B. Scoliosis Research Society-22 patient questionnaire responsiveness to change associated with surgical treatment: Preliminary results. *Scoliosis Research Society* 2001;36:103.

38. Burton D, Asher M, **Lai SM**. Patient based outcomes analysis of patients with single torsion thoracolumbar/lumbar scoliosis treated with anterior or posterior instrumentation: An average five to nine year followup. *Scoliosis Research Society* 2001;36:127.

39. Asher M, **Lai SM**, Burton D, Manna B. Steps in the refinement and validation of the Scoliosis Research Society outcome instrument. *Scoliosis Research Society* 2001;36:153**.**

40. Asher M, **Lai SM**, Burton D, Manna B. Scoliosis Research Society – 22 patient questionnaire responsiveness to change associated with surgical treatment: an update with 24-month follow-up. *Scoliosis Research Society* 2002;37:104**.**

41. Asher M, **Lai SM**, Burton D, Manna B. Trunk deformity correction stability following posterior instrumentation for idiopathic scoliosis. *Scoliosis Research Society* 2002;37:157**.**

42. Bailey A, Adler F, **Lai SM**, Asher M. A comparison between bipedal and quadripedal rats. Do bipedal rats actually assume an upright posture? *Research into Spinal Deformities* 2002;3:15-16.

43. Asher M, Burton DC, **Lai SM**, Cooper A, Manna B. Safety and efficacy of posterior Isola instrumentation and arthrodesis for idiopathic scoliosis: 2 to 12 years follow-up. *Scoliosis Research Society* 2003;38.:53.

44. Asher M, **Lai SM**, Burton D, Manna B. The influence of spine and trunk deformity on preoperative adolescent idiopathic scoliosis patient's health related quality of life questionnaire responses. *Scoliosis Research Society* 2003;38:145.

45. Templeton K, Scherl S, James M, **Lai SM**, Mosqueda T. Medical education in women's musculoskeletal health issues. *Ruth Jackson Orthopaedic Society* 2003:14(1):12.

46. **Lai SM**, Duncan PW, Perera S, Reker D, Richards L. Profile on impact of depressive symptoms after stroke. *Neurology* 2003;60(5) Suppl 1:A133.

47. **Lai SM**, Duncan PW, Dew P, Keighley J. Is functional recovery worse with women after a stroke? *Neurology* 2003;60(5) Suppl 1: A135-A136.

48. **Lai SM**, Duncan PW, Perera S, Studenski S, Reker D. Predictability of the modified NIHSS in disability and physical function after stroke. *Neurology* 2004;62(7) Suppl 5:A243-A244.

49. Perera S, **Lai SM**, Duncan PW, Reker D, Richards L. Psychometric investigation of the modified NIHSS using Rasch analysis. *Neuroepidemiology* 2004;23(3):158.

50. Burton DC, Asher MA, **Lai SM**. Re-operation following primary posterior multiple anchor instrumentation and arthrodesis for idiopathic scoliosis. *The Scoliosis Research Society 41st Annual Meeting and Pre-Meeting Course,* 2006; Page 36.

51. Burton DC, **Lai SM**, Glattes RC, Asher MA. Surgical treatment of Lenke type 3, 4 and 6 idiopathic scoliosis curves. Can they be stopped at L3? *The Scoliosis Research Society 41st Annual Meeting,Page 124.*

52. Wagner TA, **Lai SM**, Asher MA. SRS surgeon members' risk for thyroid cancer: Is it increased? *The Scoliosis Research Society 41st Annual Meeting and Pre-Meeting Course.* 2006; Page 73.

69. Burton DC, Asher MA, **Lai SM**, Glattes RC. The reliability and concurrent validity of the SRS-22r and CHQ-CF87 patient questionnaires for spinal deformity patients ages 8 through 18 years. *The Scoliosis Research Society 41st Annual Meeting and Pre-Meeting.* 2006; Page 76.

Invited or non-peer-reviewed articles or reviews: (Provide names of all authors, year, title, journal, volume, and pages. If in press, provide documentation.)

None

Oral paper presentations: (Provide names of all authors, title, sponsoring organization, and location and date of presentation.)

Scientific papers presented at national and international meetings:

1. **Lai SM**, Zhang Z, Alter M. Worldwide trends in MS mortality: 1965- 1984. *World Federation of Neurology*, Research Group on Neuroepidemiology. New York, New York, April 4, 1987.

2. Friday G, Alter M, **Lai SM**, Sobel E. Stroke frequency among Whites, Hispanics, and Blacks. *III Panamerican Symposium of Neuroepidemiology*, San Juan, Puerto Rico, October 17, 1987.

3. Alter M, **Lai SM**, Friday G, Sobel E. Trends in case-fatality rates for stroke of various types. *III Panamerican Symposium of Neuroepidemiology*, San Juan, Puerto Rico, October 17, 1987.

4. **Lai SM**, Alter M, Friday G, McCoy R. Stroke after TIA. *American Academy of Neurology*. Cincinnati, Ohio, April 19-21, 1988.

5. **Lai SM**, Alter M, Friday G, McCoy R, et al. TIA: Incidence trends in the Lehigh Valley. *American Academy of Neurology*. Cincinnati, Ohio, April 19-21, 1988.

6. Alter M, **Lai SM**, Friday G, Sobel E. Stroke in the Lehigh Valley: No association between age and risk factor status among initial stroke patients. *IV Panamerican Symposium of Neuroepidemiology* Beijing, China, 1988.

7. **Lai SM**, Alter M, Traven N, Sobel E, Friday G. Effects of diagnosis-related groups on length of hospital stay and in-hospital case-fatality rate for stroke. *American Public Health Association*, Boston, MA, November, 1988.

8. Safian RD, **Lai SM**, Hinohara T, Leon MB, Buchbinder M, Litvack F, Sanborn T, Sketch M, Baim DS. Incidence and management of abrupt closure after new device interventions: Report from the NACI Registry in 2988 lesions. *American Heart Association 66th Scientific Sessions*, Atlanta, Georgia, 1993.

9. Litvack F, **Lai SM**, Margolis J, Mehta S, Detre KM. Excimer laser coronary angioplasty: Influence of clinical and angiographic characteristics an outcome - a NACI Registry Report. *American Heart Association 66th Scientific Sessions*, Atlanta, Georgia, 1993.

10. Leon MB, Kent KM, Schatz RA, Roubin, GS, Detre KM, **Lai SM**, Baim DS. Efficiency and safety in unplanned new device angioplasty after failed PTCA. A NACI Registry Report. *American Heart Association 66th Scientific Sessions*, Atlanta, Georgia, 1993.

11. Torre SR, **Lai SM**, Schatz RA for the NACI Investigators, Scripps Clinic and Research Foundation, La Jolla, CA. Relation of clinical presentation and lesion morphology to the procedural results of Palmaz-Schatz Stent placement: A New Approaches to Coronary Intervention (NACI) Registry report. *American College of Cardiology 43rd Annual Scientific Session*, Atlanta, Georgia, 1994.

12. **Lai SM**, Alter M, Friday G. Congestive heart failure, myocardial infarction and risk of stroke recurrence. *World Federal of Neurology, Neuroepidemiology*, Seattle, Washington, 1995.

13. **Lai SM**, Alter M, Friday G. Stroke survival after discharge from an acute care hospital. *North American Stroke Meeting*, Colorado Springs, CO, 1996.

14. **Lai SM**, Graebner R. Effect of the number of causes of death on death clearance. *North American Association of Central Cancer Registries Annual Conference*, Boston, MA, 1997.

15. **Lai SM**, Duncan PW, Studenski S. Outcome predictability of Orpington Prognostic Score. *American*

Geriatrics Society, American Federation for Aging Research. Atlanta, GA, 1997.

16. Teel CS, Duncan PW, **Lai SM**. Family caregiving 1, 3, & 6 months after stroke. *The Gerontological Society of America's 50th Annual Scientific Meeting*. Cincinnati, OH, 1997.

17. Duncan PW, **Lai SM**, Wallace D, Keighley J, Johnson D. Relative efficiency of the FIM motor to the Barthel index. *American Heart Association, 23rd International Joint Conference on Stroke and Cerebral Circulation*. Orlando, FL, 1998.

18. **Lai SM**, Lassman S, Gough V. The effect on case ascertainment with pathology laboratory reporting in Kansas. *North American Association of Central Cancer Registries Annual Conference*, Vancouver, British Columbia, 1998.

19. Asher MA, Cook SM, **Lai SM**, Shobe J. Late operative site pain (LOSP) following primary posterior instrumentation and fusion for idiopathic scoliosis. *Orthopedic Associations of the English Speaking World 10th Combined Meeting*, February 1998, Auckland, New Zealand.

20. Burton DC, Asher M, **Lai SM**. The selection of fusion levels using torsional correction techniques in the surgical treatment of idiopathic Scoliosis. *Scoliosis Research Society 1998 Annual Meeting*, New York, New York, September, 1998.

21. White S, Asher M, **Lai SM**, Burton DC. Patients' perceptions of their overall function, pain and appearance following primary posterior instrumentation and fusion for idiopathic scoliosis. *Scoliosis Research Society 1998 Annual Meeting*, New York, New York, September, 1998.

22. **Lai SM**, Lassman S, Gough V. The effect on case ascertainment with pathology laboratory reporting in Kansas. *North American Association of Central Cancer Registries Annual Conference*, Vancouver, British Columbia, 1998.

23. Duncan PW, **Lai SM**, Wallace D. Reliability and validity of a new stroke outcome scale. *American Heart Association, 24th International Conference on Stroke and Cerebral Circulation*, Nashville, Tennessee, February, 1999.

24. Lassman S, **Lai SM**. Increase in prostate cancer ascertainment by the Kansas Cancer Registry. *Kansas Public Health Association*, October, 1999.

25. Lassman S, **Lai SM**, Holmes F, Wallace D. Estimating the expected number of cancer cases reported to the registry by a given hospital. *1999 Cancer Conference*, Atlanta, GA, September, 1999.

26. Asher M, **Lai SM**, Burton D. Further development and validation of the SRS Outcomes Instrument. *The 34th Scoliosis Research Society Annual Meeting*, San Diego, CA, September, 1999.

27. Burton D, Asher M, **Lai SM**. A comparison of anterior vs. posterior instrumented fusion for the treatment of thoracolumbar and lumbar idiopathic scoliosis. *The 34th Scoliosis Research Society Annual Meeting*, San Diego, CA, September, 1999.

28. Yates J, Duncan PW, Studenski S, **Lai SM**. Falls in community dwelling stroke survivors: An accumulated deficit model. *1999 American Physical Therapy Annual Conference*, San Francisco, CA, November, 1999.

29. Friday G, Alter M, **Lai SM**, Bigelow C. Control of hypertension and risk of stroke recurrence: How

low should it go? *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

30. **Lai SM**, Duncan PW, Keighley J. Depression and stroke recovery. *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

31. Duncan PW, **Lai SM**, Johnson D. Sensitivity to change of SF-36 summary scores. *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

32. **Lai SM**, Duncan PW, Keighley J, Johnson D. Depressive symptoms and stroke recovery. *The 3rd Veterans' Administration Research and Development*, Washington DC, February, 2000.

33. Webb M, Rigler S, Patel AT, **Lai SM**, Duncan PW. Anti-thrombotic therapy in the Kansas City Stroke Study. *American Geriatrics Society AFAR 2000 Annual Meeting*, Nashville, TN, May, 2000.

34. Duncan PW, Wallace D, **Lai SM**, Tyler D. Comparison of patient and proxy responses to the Stroke Impact Scale (SIS). *American Geriatrics Society AFAR 2000 Annual Meeting*, Nashville, TN, May, 2000.

35. **Lai SM**, Lassman S, Garimella S. Effect of irradiation on risk of mortality from myocardial infarction in breast cancer patients. *North American Association of Central Cancer Registries Annual Conference*, New Orleans, LA, April , 2000.

36. Lassman S, **Lai SM.** Statistical models for predicting number of cancer cases that should be reported by a hospital. *North American Association of Central Cancer Registries Annual Conference*, New Orleans, LA, April , 2000.

37. Norvell J, **Lai SM**, Duncan PW, Tyler D. Reliability of telephone interview on proxy responses to the Stroke Impact Scale. *American Geriatrics Society AFAR 2000 Annual Meeting*, Nashville, TN, May, 2000.

38. Bailey A, Adler F, **Lai SM**, Asher M. A comparison between bipedal and quadripedal rats. Do bipedal rats actually assume an upright posture? *International Research Society of Spinal Deformities*, Clermont-Ferrand 2000 Meeting, France, May 2000.

39. Asher M, Manna B, **Lai SM**, Lark R. Trunk asymmetry correction following torsional segmental spinal instrumentation for idiopathic scoliosis. *International Research Society of Spinal Deformities*, Clermont-Ferrand 2000 Meeting, France, May 2000.

40. Duncan PW, Wallace D, **Lai SM**, Tyler D. comparison of patient and proxy responses to the Stroke Impact Scale. *The 4th World Stroke Congress*, Melbourne, Australia, November 2000**.**

41. Asher M, **Lai SM**, Burton D, Manna B. The reliability and concurrent validity of the SRS-22 patient questionnaire for idiopathic scoliosis. *The 36th Scoliosis Research Society Annual Meeting*, Cleveland, OH, 2001.

42. Asher M, **Lai SM**, Burton D, Manna B. Discrimination validity of the Scoliosis Research Society-22 patient questionnaire: Relationship to idiopathic scoliosis (IS) curve pattern and curve size. *The 36th Scoliosis Research Society Annual Meeting*, Cleveland, OH, 2001.

43. Asher M, **Lai SM**, Burton D, Manna B. Scoliosis Research Society-22 patient questionnaire responsiveness to change associated with surgical treatment: Preliminary results. *The 36th Scoliosis Research Society Annual Meeting*, Cleveland, OH, 2001.

44. Burton D, Asher M, **Lai SM**. Patient based outcomes analysis of patients with single torsion thoracolumbar/lumbar scoliosis treated with anterior or posterior instrumentation: An average five to nine year followup. *The 36th Scoliosis Research Society Annual Meeting*, Cleveland, OH, 2001.

45. Asher M, **Lai SM**, Burton D, Manna B. Steps in the refinement and validation of the Scoliosis Research Society outcome instrument. *The 36th Scoliosis Research Society Annual Meeting*, Cleveland, OH, 2001.

46. **Lai SM**, Garimella S, Madarasz W, Yoakam J. Results of an independent review of pathology reports with prostate cancer. *The 2001 North American Association of Central Cancer Registries*, Miami Beach, FL, June 2001.

47. **Lai SM**, Rall M. Cancer reporting in medically underserved areas. *The 2001 North American Association of Central Cancer Registries*, Miami Beach, FL, June 2001.

48. Asher M, **Lai SM**, Burton D, Manna B. Spine deformity correlates better than trunk deformity with idiopathic scoliosis patient's quality of life questionnaire responses. *International Research Society of Spinal Deformities*, Athens, Greece, May 2002.

49. Asher M, **Lai SM**, Burton D, Manna B. Trunk deformity correction stability following posterior instrumentation and arthrodesis for idiopathic scoliosis. *International Research Society of Spinal Deformities*, Athens, Greece, May 2002.

50. **Lai SM**, Van Ness C, Dirisina M, Keighley J. Reassessment of access to cancer care in Kansas using GIS technology. *The 2002 North American Association of Central Cancer Registries*, Toronto, Canada, June 2002.

51. **Lai SM**, Garimella S, Keighley J. How valuable is it to use hospital disease index from small size hospitals for cancer case finding. *The 2002 North American Association of Central Cancer Registries*, Toronto, Canada, June 2002.

52. Duncan PW, Studenski S, Perera S, Reker D, Richards L, **Lai SM**, Yates JS, Van Culin V. Improving recovery after stroke. *The 2002 Claude D. Pepper Older Americans Independence Center Symposium*, Galveston, TX, Feb 2002.

53. Richards L, Duncan P, Perera S, **Lai SM**, Zahner L, Van Culin V. Clinical significance of Fugl-Meyer test of motor function upper extremity scores. *2002 Annual Scientific Meetings of the American Geriatrics Society*, May 2002, Washington DC.

54. Asher M, Burton DC, **Lai SM**, Cooper A, Manna B. Safety and efficacy of posterior Isola instrumentation and arthrodesis for idiopathic scoliosis: 2 to 12 years follow-up. *Scoliosis Research Society: 38th Annual Meeting*, September, 2003, Quebec City, Canada.

55. **Lai SM**, Van Ness C, Dirisina M. Environmental chemicals and risk for prostate cancer using GIS. *American Public Health Association: 131st Annual Meeting and Exposition*, November, 2003, San Francisco, CA.

56. Templeton K, Scherl S, James M, **Lai SM**, Mosqueda T. Medical education in women's musculoskeletal health issues. *Association of Bone and Joint Surgeons 55th Annual Meeting*, May 2003, Paris, France.

57. Burton D, Asher M, **Lai SM**, Cooper A, Manna B. Posterior instrumentation & arthrodesis for idiopathic scoliosis: 2-12 year follow-up. *American Academy of Orthopaedic Surgeons: 71st Annual Meeting*, March 2004, San Francisco CA.

58. Studenski S, **Lai SM**, Perera S, Duncan PW, Reker D, Richards. The interacting effects of a structured progressive therapeutic exercise intervention and depression after stroke. *American Association of Geriatric Psychiatry 17th Annual Meeting*, February 2004, Baltimore, Maryland.

59. Kwon S, Duncan P, Alfrey C, Marquez J, Perera S, Studenski S, **Lai SM**, Reker D. Measuring health related quality of life in veterans with stroke, *VA Research & Development National Meeting*, March 2004, Washington DC.

60. **Lai SM**, Asher M, Burton D, Manna B. Adolescent idiopathic scoliosis assessment: Generic vs. disorder specific health related quality of life (HRQL) questionnaire. *The International Research Society of Spine Deformities Symposium,* June 2004, Vancouver, Canada.

61. Asher M, **Lai SM**, Burton D, Manna B, Cooper A. Safety and efficacy of Isola Instrumentation and arthrodesis for adolescent idiopathic scoliosis: 2 to 12 year follow-up. *International Research Society of Spine Deformities Symposium.* Vancouver, 2004, Canada.

62. **Lai SM**, Studenski S, Richards L, Perera S, Reker D, Rigler S, Duncan PW. Therapeutic exercise and depression after stroke. *International Stroke Conference, American Heart Association*, February, 2005, New Orleans, Louisiana.

63. Zohoori N, VanEenwyk J, **Lai SM**. Conducting state cardiovascular health examination surveys: Planning, challenges and opportunities. *The 2006 CSTE Annual Conference*, Los Angeles, California.

64. Shoob HD, Croft JB, Zohoori N, **Lai SM**, VanEenwy J. Development and implementation of a demonstration model of a state cardiovascular health examination survey. *The CDC National Health Promotion Conference,* Atlanta, Georgia, 2006.

65. **Lai SM**, Shen Z, Bank D. Inclusion of non-street addresses in cancer cluster analysis. *The 2006 ESRI Health GIS Conference*, Denver, Colorado, October, 2006.

66. Burton DC, Asher MA, **Lai SM**. Re-operation following primary posterior multiple anchor instrumentation and arthrodesis for idiopathic scoliosis. *The Scoliosis Research Society 41st Annual Meeting,* Monterey, Caliofornia. 2006.

67. Burton DC, **Lai SM**, Glattes RC, Asher MA. Surgical treatment of Lenke type 3, 4 and 6 idiopathic scoliosis curves. Can they be stopped at L3? *The Scoliosis Research Society 41st Annual Meeting,* Monterey, Caliofornia. 2006.

68. Wagner TA, **Lai SM**, Asher MA. SRS surgeon members' risk for thyroid cancer: Is it increased? *The Scoliosis Research Society 41st Annual Meeting,* Monterey, Caliofornia. 2006.

69. Burton DC, Asher MA, **Lai SM**, Glattes RC. The reliability and concurrent validity of the SRS-22r and CHQ-CF87 patient questionnaires for spinal deformity patients ages 8 through 18 years. *The Scoliosis Research Society 41st Annual Meeting,* Monterey, Caliofornia. 2006.

Scientific papers presented at local and regional meetings:

1. **Lai SM**, Rall M. Risk Factors Associated With Premature Babies. Research Forum, sponsored by Wichita State University and the University of Kansas School of Medicine at Wichita, KS, 1994.

2. Lassman S, **Lai SM**, "Cancers in Kansas." Kansas Public Health Association, October 1997.

3. Lassman S, Keighley J, **Lai SM**, "Enhanced reporting in the Kansas Cancer Registry." Kansas Public Health Association, October 1998.

4. Yates-Stoker J, Duncan PW, **Lai SM**, "Factors related to falls in stroke patients between 1 and 3 months." Kansas Public Health Association, 1998.

5. Lassman S, **Lai SM**, "Increase in prostate cancer ascertainment by the Kansas Cancer Registry." Kansas Public Health Association, October 1999.

6. **Lai SM,** Duncan PW, Keighley J. Depression and stroke recovery. Kansas Public Health Association, October 2000.

7. **Lai SM**, Tian C, Keighley J, Garimella S. Occupation and risk for prostate cancer. 2001 Kansas City Areas Cancer Research Conference, Sponsored by Midwest Research Institute, Kansas City, April, 2001.

8. **Lai SM**. Implications of HIPAA for the Kansas Cancer Registry. Sponsored by the Kansas Health Data Governing Board, March, 2001.

9. **Lai SM**, Rall M. Kansas Cancer Registry - Cancer Surveillance, Prevention and Control. The Heartland Native Americans Cancer Conference, October, 2001.

10. Dew PC, **Lai SM**, Duncan PW, Keighely J. Factors contributing to gender differences in stroke recovery. The University of Health Sciences Research Symposium, 2004.

11. Guillory VJ, **Lai SM**, Sharp G. Predictors of low birth weight, Kansas, 1999. The University of Health Sciences Research Symposium, 2004.

12. **Lai SM**. Measures of Cancer Burden. Comprehensive Cancer Conference, March, 2004, Topeka, Kansas.

Poster presentations: (Provide names of all authors, title, sponsoring organization, and location and date of presentation.)

Poster presentations at national and international meetings:

1. LaRue L, Sobel E, Alter M, **Lai SM**, Friday G, Zhang Z, Reyes E, Schwartz G, Davanipour Z, Levitt L, McCoy R, Isack T. Stroke in the Lehigh Valley; Stroke type and the hemogram: A population study. *World Federation of Neurology*, Research Group on Neuroepidemiology. New Orleans, Louisiana, May 3, 1986.

2. Sobel E, Zhang Z, **Lai SM**, Alter M, Davanipour Z, Friday G. Seasonal variation in stroke rates. (Pan-African Neurological Association) *7th Reunion Pan African DeNeurogie Et De Neurochirurgie*, Abidjan, Ivory Coast, April 27-30, 1986.

3. Alter M, Zhang Z, Sobel E, **Lai SM**. Does delay in acquiring childhood infections increase risk of multiple sclerosis? *Society for Epidemiologic Research*, Pittsburgh, Pennsylvania, June 18-22, 1986.

4. Alter M, Zhang Z, **Lai SM**, LaRue L. Correlations between multiple sclerosis mortality and selected infectious diseases. *American Neurologic Association*, Boston, MA, October 9, 1986.

5. Friday G, Alter M, **Lai SM**. Racial differences in stroke in the Lehigh Valley. *Association of American Neurology*, New York, New York, April 7, 1987.

6. Friday G, Alter M, **Lai SM**, Sobel E. Stroke frequency among whites, Hispanics and blacks. *Panamerican symposium of Neuroepidemiology*, Puerto Rico, October 17, 1987

7. Traven ND, Alter M, Reyes E, **Lai SM**, Friday G, Levitt L. Use of consultants for stroke patients after introduction of computerized tomography. *World Federation of Neurology*, Cincinnati, Ohio, April 22, 1988.

8. Traven ND, Alter M, Reyes E, **Lai SM**, Friday G, Levitt L. Trends in neurodiagnostic procedure use after introduction of computerized tomography. *World Federation of Neurology*. Cincinnati, Ohio, April 22, 1988.

9. Alter M, Davanipour Z, Sobel E, Friday G, **Lai SM**. Smoking: recurrent stroke and death. *American Neurological Association*. New Orleans, Louisiana, September 24-27, 1989.

10. Alter M, Tournier B, Gil-Peralta A, **Lai SM**. Acute stroke trials: frequency and reasons for patients drop-out. *World Federation of Neurology*. New Delhi, India. October 22-27, 1989.

11. **Lai SM**, Alter M, Friday G, Sobel E. Smoking and risk of death/second stroke. *42nd Annual Meeting of the American Academy of Neurology*. Research Group on Neuroepidemiology. Miami, Florida, April, 1990.

12. Alter M, **Lai SM**, Davanipour Z, Sobel E. Stroke and mortality in smokers and non-smokers. *42nd Annual Meeting of the American Academy of Neurology*. Research Group on Neuroepidemiology. Miami, Florida, April, 1990.

13. Koslowski H, Friday G, Alter M, **Lai SM**, Toedter L, Sobel E. Motor improvement after intracerebral hemorrhage and cerebral infarction in the Lehigh Valley cohort: *World Federation of Neurology.* Boston, MA, April 22, 1991.

14. Friday G, Alter M, **Lai SM**, Capuzzi D, Papale M, Toedter L. Lipid and glucose levels in diabetics after stroke. *International Conference on Stroke*. Geneva, Switzerland, May, 1991.

15. Pickering N, Alter M, **Lai SM**, Haberman R, Sobel E, Friday G. Cardiac arrhythmias: A predictor of recurrent stroke and death after initial stroke. *World Federation of Neurology Meeting*. San Diego, CA, May 4, 1991.

16. Wiens LA, Walker D, Fischer K, Soeken L, **Lai SM**. Optimal dosing for allergen immunotherapy. *American College of Allergy, Asthma and Immunology*, Dallas, TX, 1995.

17. Alter M, **Lai SM**, Friday G, Sobel E. Risk of stroke recurrence in well-controlled diabetics. *122nd Annual Meeting of the American Neurological Association*, San Diego, CA, 1997.

18. Friday G, Alter M, **Lai SM**, Sobel E. Transient ischemic attack and risk of stroke recurrence. *122nd Annual Meeting of the American Neurological Association*, San Diego, CA, 1997.

19. Duncan PW, **Lai SM**, Keighley J, Rymer M. Time to medical attention after a mild or moderate acute stroke. *American Heart Association, 23rd International Joint Conference on Stroke and Cerebral Circulation*. Orlando, FL, 1998.

20. **Lai SM**, Duncan PW, Keighley J, Studenski S. Prognostic ability of Orpington Prognostic Scale and NIH stroke scale. *American Heart Association, 23rd International Joint Conference on Stroke and Cerebral Circulation*. Orlando, FL, 1998.

21. **Lai SM**, Duncan PW, Patel A. Effect of cognitive impairment and hemianopsia on functional outcomes of stroke patients with motor deficit. *1998 American Geriatrics Society and The American Federation for Aging Research Annual Meeting*, Seattle, WA, 1998.

22. Patel A, Duncan PW, **Lai SM**. Relationship between impairments and functional outcomes post stroke. *1998 American Geriatrics Society and The American Federation for Aging Research Annual Meeting*, Seattle, WA, 1998.

23. Yates-Stoker J, Duncan PW, **Lai SM**. Factors related to falls in stroke patients between 1 and 3 months. *1998 American Geriatrics Society and The American Federation for Aging Research Annual Meeting*, Seattle, WA, 1998.

24. Duncan PW, Wallace D, **Lai SM**, Studenski S. Development of a stroke-specific outcomes scale. *1998 American Geriatrics Society and The American Federation for Aging Research Annual Meeting*, Seattle, WA, 1998.

25. Duncan PW, Wallace D, **Lai SM**, Studenski S. Development of a stroke specific outcomes scale. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998, Washington DC.

26. **Lai SM**, Duncan PW, Keighley J. Prognostic ability of Orpington Prognostic Scale and NIH Stroke Scale. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998, Washington DC.

27. Duncan PW, **Lai SM**, Keighley J, Rymer M. Time to medical attention after a mild or moderate acute stroke. *Veterans Administration 1st National Meeting Rehabilitation Research & Development Service*. October, 1998, Washington DC.

28. Duncan PW, **Lai SM**, Wallace D. Reliability and validity of a new stroke outcome scale. *American*

Heart Association, 24th International Conference on Stroke and Cerebral Circulation, Nashville, Tennessee, February, 1999.

29. **Lai SM**, Duncan PW, Keighley J. Stroke related impairments and quality of life. *American Heart Association, 24th International Conference on Stroke and Cerebral Circulation*, Nashville, Tennessee, February, 1999.

30. **Lai SM**, Duncan PW, Johnson D, Wallace D. Sensitivity to change of post-stroke health status assessments. *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

31. Wallace D, Duncan PW, **Lai SM.** Are the FIM motor scale and Barthel index responsive to stroke recovery? *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

32. Wallace D, Duncan PW, **Lai SM.** The Stroke Impact Scale, a sensitive and consistent measure of stroke recovery. *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

33. Duncan PW, Harrison DJ, **Lai SM**, Cook SF, Rymer MM. Factors affecting elapsed time between acute stroke and presentation. *American Heart Association, 25th International Conference on Stroke and Cerebral Circulation*, New Orleans, LA , February, 2000.

34. **Lai SM**, Duncan PW, Keighley J, Johnson D. Depression and stroke recovery. *The 3rd Veterans' Administration Research and Development Annual Conference*, Washington DC, February, 2000.

35. Wallace D, Duncan PW, **Lai SM.** Are the FIM motor scale and Barthel index responsive to stroke recovery? *The 3rd Veterans' Administration Research and Development Annual Conference*, Washington DC, February, 2000.

36. Duncan PW, **Lai SM**, Johnson D. Sensitivity to change of SF-36 summary scores. *The 3rd Veterans' Administration Research and Development Annual Conference*, Washington DC, February, 2000.

37. Asher M, Manna B, **Lai SM**, Lark R. Trunk asymmetry correction following torsional spinal instrumentation for thoracic idiopathic scoliosis. *Scoliosis Research Society 35th Annual Conference*, Cairns, Australia, October, 2000.

38. Asher M, **Lai SM.** End and adjacent vertebra alignment of instrumented Scheuermann's hyperkyphosis. *Scoliosis Research Society 35th Annual Conference*, Cairns, Australia, October, 2000.

39. Bailey A, Adler F, **Lai SM**, Asher M. A comparison between bipedal and quadripedal rats. Do bipedal rats actually assume an upright posture? *Scoliosis Research Society 35th Annual Conference*, Cairns, Australia, October, 2000.

40. **Lai SM**, Studenski S, Duncan PW, Perera S. Persisting deficits of stroke measured by the Stroke Impact Scale. *The 2001 Claude D. Pepper Older Americans Independence Center Symposium*, Rochester, NY, May 2001.

41. **Lai SM**, Duncan PW, Bode R. Comparison of the SIS-16 vs. the Barthel Index - A secondary analysis of the GAIN Americas Study. *The 53rd American Academy of Neurology Annual Conference*, Philadelphia, PA, May 2001.

42. Duncan PW, **Lai SM**, Bode R. Rasch Analysis of a new Stroke Specific Outcome Scale: The Stroke Impact Scale. *The 53rd American Academy of Neurology Annual Conference*, Philadelphia, PA, May 2001.

43. Dubinsky R, Tyler D, Perera S, Duncan PW, **Lai SM**. Driving after stroke: Effects of severity and advice on driving. *The 53rd American Academy of Neurology Annual Conference*, Philadelphia, PA, May 2001

44. VanCulin V, Duncan PW, Perera S, **Lai SM**, Richter K. A comparison of two global assessments of stroke recovery: the simple questions and the Modified Rankin Scale. *American Heart Association, 27th International Conference on Stroke and Cerebral Circulation*, February, 2002.

45. Richards LG, Duncan PW, Perera, S, **Lai SM**, Zahner L, Van Culin T. The clinical significance of Fugl-Meyer test of motor function upper extremity sores. *The 2002American Geriatrics Society and The American Federation for Aging Research Annual Meeting*, Washington DC, May, 2002.

46. **Lai SM**, Perera S, Duncan PW, Bode R. Physical and social functioning after stroke: comparison of the Stroke Impact Scale and short form-36. *The 54th American Academy of Neurology Annual Conference*, Denver, CO, April 2002.

47. Scherl S, James MA, **Lai SM**, Templeton KJ. Roth Jackson Orthopedic Society, *American Academy of Orthopaedic Surgeons*, New Orleans, LA, February, 2003.

48. **Lai SM**, Duncan PW, Perera S, Reker D, Richards L. Profile on impact of depressive symptoms after stroke. *The 55th American Academy of Neurology Annual Conference*, Honolulu, HI, April, 2003.

49. **Lai SM**, Duncan PW, Dew P, Keighley J, Zahner L. Is functional recovery worse with women after a stroke? *The 55th American Academy of Neurology Annual Conference*, Honolulu, HI, April, 2003.

50. **Lai SM**, Duncan PW, Perera S, Richards L, Reker D, Studenski S, Rigler S. Newly developed depressive symptoms after stroke and their impact on health related quality of life. *The 2003 American Geriatrics Society Annual Conference*, Baltimore, MD, May, 2003.

51. Studenski S, **Lai SM**, Duncan PW, Rigler S. The impact of cumulative comorbidities on stroke recovery. . *The 2003 American Geriatrics Society Annual Conference*, Baltimore, MD, May, 2003.

52. **Lai SM**, Gray J, Garimella S, Keighely J, Murphy P. Digital document management – There is far more to it than it meets the eyes. *The 2003 North American Association of Central Cancer Registry Annual Conference*, Honolulu, HI, June, 2003.

53. **Lai SM**, Garimella S, Keighley J. Hospices – Another source of cancer reporting. *The 2003 North American Association of Central Cancer Registry Annual Conference*, Honolulu, HI, June, 2003.

54. Duncan PW, Studenski S, Richards S, Gollub S, **Lai SM**, Reker D, Perera S, Yates J, Koch V, Rigler S, Johnson D. A Randomized Clinical Trial of Therapeutic Exercise in Sub-Acute Stroke. *The 2003 Claude D. Pepper Older Americans Independent Center Symposium*, Chapel Hill, NC, 2003.

55. Studenski S, **Lai SM**, Duncan PW, Rigler S. The impact of cumulative comorbidities on stroke recovery. *The 2003 Claude D. Pepper Older Americans Independent Center Symposium*, Chapel

Hill, NC, 2003.

56. Studenski S, Duncan PW, Perera S, Reker D, **Lai SM**, Richards L. The effects of a structured progressive therapeutic exercise on functioning and quality of life after stroke, *The 56th Annual Scientific Meeting of the Gerontological Society of America*, November 2003, San Diego, California.

57. Studenski S, Duncan PW, Perera S, **Lai SM**, Reker D. The effect of time since stroke on recovery of impairments and functional limitations in a randomized clinical trial, *The 56th Annual Scientific Meeting of the Gerontological Society of America*, November 2003, San Diego, California.

58. Studenski S, **Lai SM**, Rigler S, Perera S, Duncan PW. The impact of cumulative comorbidities on stroke recovery. *Annual Meeting of the American Geriatrics Society*, May 2003, Baltimore, Maryland.

59. Asher M, **Lai SM**, Burton D, Manna B. The influence of spine and trunk deformity on preoperative adolescent idiopathic scoliosis patient's health related quality of life questionnaire responses. *Scoliosis Research Society: 38th Annual Meeting, September, 2003, Quebec City, Canada.*

60. Kwon S, Hartzema AG, Duncan P, **Lai SM**. The clinical meaning of the Barthel Index, the Functional Independence Measure, and the Modified Rankin Scale. The 19th International Conference on Pharmacoepidemiology Annual Conference, August 2003, Philadelphia, PA.

61. Scherl S, James MA, **Lai SM**, Templeton KJ. Medical education in women's musculoskeletal health Issues. *American Academy of Orthopaedic Surgeons 70th Annual Meeting*, February, 2003, New Orleans, Louisiana.

62. Kwon S, Reker D, **Lai SM**, Perera S, Studenski S, Alfrey C, Marquez J, Duncan P. Stroke Impact Scale Measuring quality of life in Veterans with stroke, *Health services Research & Development*, March 2004, Washington DC.

63. **Lai SM**, Garimella S, Keighley J. Pathology and dermatology reports: Key in completeness of melanoma cancer reporting in population-based cancer registries. *The 2004 North American Association of Central Cancer Registry Annual Conference*, June 2004, Salt Lake City, UT.

64. **Lai SM**, Banks D, Shen Z. County-specific TIGER files: An alternate method in statewide geocoding. *The 2004 North American Association of Central Cancer Registry Annual Conference*, June 2004, Salt Lake City, UT.

65. Perera S, **Lai SM**, Duncan PW, Reker D, Richards L. Psychometric investigation of the modified NIHSS using Rasch analysis. *Regional North American Annual Meeting of the World Federation of Neurology – Research Group on Neuroepidemiology*, April 2004, San Francisco, CA.

66. Schmid A, Duncan P, Studenski S, Richards L, **Lai SM**, Reker D, Perera S, Wu S. Defining clinically meaningful changes in gait speed in a post-stroke therapeutic exercise at 3 months. *American Congress of Rehabilitation Medicine.* 2004, Ponte Vedra Beach, FL.

67. **Lai SM**, Duncan PW, Perera S, Studenski S, Reker D. Predictability of the modified NIHSS in disability and physical function after stroke. The 56th American Academy of Neurology Annual Conference, San Francisco, CA, 2004.

68. Schmid A, Duncan P, Studenski S, Richards L, **Lai S**, Reker D, Perera S, Wu S. Changes in gait speed after stroke and the effect on participation in ADLs and IADLs. The 2005 American Geriatric Society Annual Meeting, Orlando, FL, 2005.

69. Dubinsky R, **Lai SM**. US Stroke mortality with thrombolysis – Hospital morbidity and mortality of stroke patients treated with thrombolysis. Analysis of nationwide inpatient sample (NIS). The 57th American Academy of Neurology Annual Conference, Miami Beach, FL, 2005.

70. **Lai SM**, Keighley J, Krebill R. Is age-adjusted incidence to mortality ratio a useful tool? *The 2005 North American Association of Central Cancer Registry Annual Conference*, June 2005, Boston, MA.

71. **Lai SM**, Garimella S, Keighley J. Shen Z, Richardson T. Significance of Non-hospital physician reporting. *The 2006 North American Association of Central Cancer Registry Annual Conference.* Regina, Saskatchewan, Canada, June 2006.

Poster presentations at local and regional meetings:

None

Invited seminars at other universities: (Provide title, sponsoring organization or institution, and date of presentation.)

1. Presented lecture on "Establishing a Kansas Cancer Registry," at the School of Allied Health, Wichita State University, Wichita, KS, Spring 1994.

2. Presented a course for Continued Medical Education credits on "Research Methods and Designs," University of Kansas School of Medicine, Wichita, KS, 1994.

3. Presented lecture on "Cancers in Kansas," for the Sedgwick County and other local health departments officials in Kansas, Wichita, KS, 1994.

4. Presented lecture on "Kansas Cancer Registry - Cancer Surveillance System," Third Annual Meeting of Breast and Cervical Cancer Annual Forum, Topeka, KS, 1996. Audience included Lieutenant Governor of the state of Kansas.

5. Presented lecture on "Impact and Significance of Cancer Reporting from Pathology Laboratory," Kansas Society of Pathologists Annual Conference, Topeka, KS, 1996.

6. Presented lecture on "Kansas Cancer Registry - Case Ascertainment," Free to Know Annual Forum, Topeka, KS, 1997.

7. Presented a seminar on "Blood sugar control and risk of stroke recurrence," at the Center for Clinical Epidemiology and Biostatistics (CCEB), University of Pennsylvania, January 29, 1997.

8. Grand Rounds to neurologists in Long Island on "Research design and methodologies in organizing community based stroke registries," sponsored by Department of Neurology, The Stony Brook State University of New York, June 1, 1998.

9. Grant Rounds on "Prediction of functional outcome after stroke: comparison of the Orpington Prognostic Scale and the NIHSS," for the Departments of Neurology and Neurological Surgery, The Stony Brook State University of New York, June 2, 1998.

10. Presented seminar on “Breast and Cervical Cancers in Kansas,” Breast Cancer Symposium, Salina, KS, 1998.

11. Presented lecture on “Effect of Cognitive Impairment and Hemianopsia on Functional Outcomes of Stroke Patients With Motor Deficit,” Kansas City Stroke Study Investigators’ Journal Club, KUMC, 1998.

12. Presented lecture on “Relationship Between Impairments and Functional Outcomes Post Stroke,” Kansas City Stroke Study Investigators’ Journal Club, KUMC, 1998.

13. Presented “Most Prevalent Cancers in Kansas,” Comprehensive Cancer Control, Topeka, KS, 1998.

14. Offered two workshops for the 1998 North American Stroke Meeting Faculty entitled, “Functional Outcomes Measures of Mobility, Cognition, Communication and Quality of Life,” September 1999.

15. Presented lecture on “Quality of Life after Stroke,” at the Center on Aging Research Seminar, CME credits, Center on Aging, University of Kansas Medical Center, May 1999.

16. Presented lecture on “Predictive Measures of Stroke Recovery,” at the Kansas City Stroke Seminar Series, CME credits from Center on Aging, University of Kansas Medical Center, June 1999.

17. Presented seminar on “Cervical cancer: Screening, treatment, and associated economic costs”, Kansas Department of Health and Environment, November, 1999.

18. Faculty, the Center on Aging continuing education seminar series, Thomas Jefferson University – Jefferson Medical College, Philadelphia, PA, July, 2000.

19. Invited speaker for the President’s Cancer Panel sponsored by the National Cancer Institute. Title of the lecture was “Cancers in Medically Underserved Areas in Kansas”, Omaha, NE, June, 2000.

20. Invited speaker for the U.S. Senate Sub-committee for Cancer Coalition. Title: Strategies for conducting cancer cluster investigations. Washington DC, June, 2001.

21. Grand Rounds to neurologists, nurses, and physical therapists on “Depression and stroke survivors”, The University of Florida, Gainesville, FL, 2002.

22. Invited speaker for the NPCR Program Directors’ Meeting, sponsored by the Centers for Disease Control and Prevention. Title: Prostate cancer in rural medically underserved areas. 2002.

23. Faculty and sponsor for CE hours workshops providing training in coding using the International Classification of Diseases - Oncology Version 3, 2002.

24. Faculty, Administration of the Stroke Impact Scale: mRECT North America Study, San Francisco, CA, July 2002.

25. Invited speaker to the Cultural University, Taipei, Taiwan on topics of “Development of a Patient Outcome Questionnaire”, January, 2002.

26. Faculty, Selection of Outcomes Measures in Acute Stroke Trials: 2506/INT0104 Study, San Francisco, CA, July, 2002

27. Faculty, Outcomes Assessment in Acute Stroke Trials: mRECT Canadian Study, Vancouver, Canada, 2002.

28. Invited speaker to National Taiwan University, Taipei, Taiwan on topics of "Stroke Impact Scale", January, 2003.

29. Faculty, Administration of the Stroke Impact Scale: mRECT European Study, Rome, Italy, 2003.

30. Faculty, Specialist Meeting – Prostate Cancer Geocoding: Assessing fitness for use, Center for Health Policy & Research, The University of Iowa College of Public Health, March – April, 2004.

31. Faculty, Outcomes and Health Services Research Seminar Series, University of Cincinnati, OH, 2004.

32. Faculty, Depression after Stroke – Research Seminar Series at the University of Drexel University, School of Public Health, Philadelphia, 2005.

SERVICE:

Professional Service:
National/International:

Study Sections/Review Panel

Prevention Research Center Grants Review Panel, Centers for Disease Control and Prevention (CDC); 2000-2004.
PERT – RFA, Centers for Disease Control and Prevention, grant reviewer, June, 2000
Preventive Medicine and Public Health Fellowship Program, Association of Teachers of Preventive Medicine (ATPM) and CDC – Fellowship Grant Application Reviewer, 2002-2003
Canadian Stroke Network, Study Section, 2003
Special Emphasis Projects (SEP) – RFA, Centers for Disease Control and Prevention, grant reviewer, June, 2000
Epidemiology of Chronic Diseases (ECD) Study Section, NIH, member, 2004-2005
Cancer Prevention and Control Conference Abstract Review Panel, CDC, May, 2001
Cancer Prevention and Control Conference Abstract Review Panel, CDC, March, 2002
Cancer Prevention and Control Conference Abstract Review Panel, CDC, April 2003
Scientific Evaluator, the University of Health Sciences Research Symposium, January, 2004
Harrington Spine Symposium, Abstract review committee, 2004-2005
Charter member, the NIH Cardiovascular and Sleep Epidemiology Study Section, 2005-2009

Editorial Boards:
Editorial Board, Neuroepidemiology, 1996 - present

Editorial Activities:
Reviewer, Neurology, 2000-present
Reviewer, Mayo Clinic Proceedings, 2000-present
Reviewer, Archives of Physical Medicine and Rehabilitation, 2000-present
Reviewer, Stroke, 2001 - present
Reviewer, Journal of Rehabilitation Research and Development, 2001-present
Reviewer, Journal of Quality of Life Research 2001-present
Reviewer, American Journal of Medicine, 2004
Editor, U.S. Colorectal Cancer Monograph (will appear as a supplement of journal Cancer), 2004-2006
Reviewer, Annals of Epidemiology, 2005-2006

Scientific Advisory Boards:

Consultant to CDC for planning of national level cancer surveillance, December 1999 - 2002
Scientific advisory group for publication of the United States Cancer Statistics, the National Program for Cancer Registries, CDC, 2001- present.
Co-Chair, Section of Epidemiology of Spine Deformities, International Research Society of Spinal Deformities, Athens, Greece, 2002
Advisor to the CDC on drafting RFAs for cancer related research - cancer screening, registration, and establishment of statewide comprehensive cancer initiatives, 2001
Advisor, the Johnson County Health Department Needs Assessment, 1996 – present
Advisor, Kansas Comprehensive Cancer Prevention and Control, 2003-present

Community activities:

Kansas Representative, "The Institute for State Leaders" sponsored by the Centers for Disease Control and Prevention, National Cancer Institute, and American Cancer Society to plan, set the stage, and move forward the Initiative for Comprehensive Cancer Control in the national level, 2000
Spokesperson, the section of cervical cancer control and planning, 1999 - present
Kansas State Representative, state group meetings and presentations to CDC, 1999 - present
Kansas Representative, Heartland Triad Cancer Control, 1999 - present
Expert Witness to the KS Senate Committee of Public Health and Welfare, 2003
Judge, Greater Kansas City Science and Engineering Fair, 1998 - 2002
Invited to a panel discussion on current stroke care, hosted by NPR (National Public Radio), 2003.
Interviewed by Channel 4 Newscast to discuss the benefits of the interventional exercise program designed by the KUMC investigators for stroke patients, July 2003.

Committees (National and Local):

Election Committee, North American Association of Central Cancer Registry, 1999.
Member, joint committee of cancer control for four states including Kansas, Missouri, Nebraska, and Oklahoma, sponsored by the American Cancer Society and American College of Surgeons in order to 1) identify and evaluate current data resources available for cancer control planning for the four states; 2) facilitate the implementation of a community-based planning model; 3) improve access to local data; and 4) increase involvement of the physician community in cancer control planning and implementation.
Stroke Council, American Heart Association, 1996 – present
Epidemiology Council, American Heart Association, 1996 - present
Member, Kansas Stroke Coalition, 1996 - present
Chair, Kansas Cancer Data Release Advisory Board, 1997 - present.
Steering Committee, Kansas Statewide Comprehensive Cancer Prevention and Control, 2001-2002
Committee, the task force of organizing a Kansas Statewide Cancer Control Initiative, 1998 - 2001
Executive member, World Federation of Neurology on worldwide effort in stroke prevention and control, 1998 – present
Steering Committee, the state of Kansas and Heartland Region Geographical Information System, 2003-present (appointed by Dr. Hagen to represent KUMC)
Executive Committee, Kansas Comprehensive Cancer Prevention and Control, 2002-2007
Scientific Workgroup, National Program for Cancer Registries, 1999-present
Publication Committee for NPCR and SEER on the U.S. Colorectal Cancer Monograph
Steering Committee for NPCR and SEER on the U.S. Colorectal Cancer Monograph
Curriculum Development Work Group, The North America Association of Central Cancer Registry (NAACCR) Cancer Surveillance Institute

Academic service activities:

Member, Human Subjects Committee School of Medicine, Wichita, 1993 - 1995
Admission Committee, MPH Kansas, 1993 - 1995
Search Committee, Preventive Medicine faculty position, 1995 - 1996
Search Committee, Director of the MPH Kansas, 1995 - 1996
Search Committee, Preventive Medicine and Center on Aging faculty position - Biostatistician, 1995 – 1998
Search Committee, Preventive Medicine Vice Chair position, 1996 - 1997
Chair, Preventive Medicine Excellence funds, 1995 - 1997
MPH Curriculum Committee, MPH Kansas, 1995 - 1997
Search Committee, the Section of Orthopedic Surgery, Department of Surgery - faculty position, 2000
Research Committee, MPH Kansas 1998 - 2000
Search Committee, two Preventive Medicine faculty members in biostatistics, 1997 - 1999
Search Committee, Preventive Medicine and Center on Aging faculty position - Biostatistician, 2000
Member, Advisor Committee to the Kansas Cancer Institute, 1998-2002
Member, Department of Preventive Medicine Promotion and Tenure Committee, 1999 – 2000
Chair, Department of Preventive Medicine Promotion and Tenure Committee, 2001
Member, Nominating committee of the North American Association of Central Cancer Registries, 2000 - 2001
Member, SOM Research Space Committee, 2000 - 2002
Award committee, MPH and Medical school students in public health, 2000 - 2004
Search Committee, Preventive Medicine faculty position in epidemiology, 2000 - present
Search Committee, Preventive Medicine faculty position in biostatistics, 2000 - present
Search Committee, Department of Neurology - faculty position, 2002-2003
Mentored junior faculty in research design and analysis, resulting 7 peer-reviewed journal publications [Patel (2000), Teel (2001), Wallace (2002), Burton (2000), and Pohl (2002)] and numerous presentations [Teel (1997), Wallace (2000), Burton (2000, 2001), Pohl (2002), Richards (2002), Dew (2004)]
Chair, Research Committee, MPH Kansas 2001 – present
Chair, Joint Departmental Promotion and Tenure Committee, 2002 – 2003 (for Departments of Preventive Medicine, Health Policy and Management, and History and Philosophy of Medicine)
Committee member, Departmental Promotion and Tenure Committee, 2003 – present
Chair of Curriculum Committee for the Master of Science in Clinical Research, Department of Preventive Medicine and Public Health, 2004
Member of Executive Committee for the Master of Science in Clinical Research, Department of Preventive Medicine and Public Health, 2004
Member, KUMC LCME Outcome Evaluation Committee, 2004
Search Committee for Vice Chair for Research, faculty, and post-doctor, Department of Preventive Medicine and Public Health, 2004
Member, KUMC LCME Outcome Assessment Sub-committee, 2004
Steering Committee, Master of Science Degree, Department of Preventive Medicine & Public Health, 2004
Chair, Master of Science Curriculum Committee, 2004-present