

**UNIVERSITY OF ROCHESTER
SCHOOL OF MEDICINE AND DENTISTRY
CURRICULUM VITAE**

Xueya Cai, PhD

Department of Biostatistics and Computational Biology
University of Rochester School of Medicine and Dentistry
601 Elmwood Avenue, Saunders Research Building 4208
Rochester, NY, 14642
Phone: 585-275-2162
Fax: 585-273-1031
Email: Xueya_Cai@urmc.rochester.edu

CURRENT POSITIONS

Research Associate Professor
University of Rochester School of Medicine & Dentistry, Rochester, NY

Editor in Chief. Health Services and Outcome Research Methodology
NIH Study Section Member: Health Services: Quality and Effectiveness (HSQE)

EDUCATION

Ph.D. Biostatistics, SUNY Buffalo, 2008
M.A. Biostatistics, SUNY Buffalo, 2006
B. Medicine Maternal and Child Health, Shanghai Medical University, China, 1997

FACULTY APPOINTMENTS

2015 – Present Research Associate Professor (primary). Department of Biostatistics and Computational Biology, University of Rochester, Rochester NY
2018 – 2019 Research Associate Professor (secondary). Department of Ophthalmology. Rochester NY
2015 – 2018 Statistician (IPA). Canandaigua VA Medical Center. Canandaigua, NY
2011 – 2015 Research Assistant Professor. Department of Biostatistics and Computational Biology, University of Rochester. Rochester NY
2009 – 2011 Research Assistant Professor. Department of Internal Medicine, University of Iowa Carver College of Medicine. Iowa City IA
2008 – 2009 Assistant Professor. Division of Biostatistics, Indiana University School of Medicine. Indianapolis IN
2005 – 2008 Research Assistant. Division of Infectious Disease, Buffalo VA Medical Center. Buffalo NY
2004 – 2005 Research Assistant. Department of Biostatistics, SUNY Buffalo. Buffalo NY
2003 – 2004 Research Assistant. Periodontal Disease Research Center (PDRC), SUNY at Buffalo. Buffalo NY
1997 – 2001 Assistant Professor. Department of Biostatistics, Shanghai Medical University. Shanghai China

PROFESSIONAL NON-ACADEMIC EMPLOYMENT HISTORY

1999 – 2001 Biostatistician (Part-time). Shanghai Sunline Data Scientific Processing Company, China

HONORS AND AWARDS

- 2020 Journal of American Geriatrics Society Most Cited Award for the study " Li Y, Temkin-Greener H, Gao S, Cai X. COVID-19 infections and deaths among Connecticut nursing home residents: facility correlates. Journal of the American Geriatrics Society 2020, 68(9): 1899-1906
- 2018 Research to Prevent Blindness/American Academy of Ophthalmology Award for IRIS Registry Research
- 2011 Delta Omega Honorary Society in Public Health
- 2006 Award for Outstanding PhD's student. Department of Biostatistics, SUNY Buffalo
- 2005 Sidney Adelman Award for Outstanding Master's Student. Department of Biostatistics. SUNY Buffalo
- 2004 Prize for the Outstanding Student Poster. Bayesian Approach and Power Analysis for Temporal Gene Expression Data for the Treatment of IFN in Relapsing Multiple Sclerosis Patients. Buffalo Center for Biomedical Computing Retreat/Symposium

ACADEMIC & PROFESSIONAL ORGANIZATIONS

- 2005 – present The American Statistical Association (national)
- 2019 The American Academy of Ophthalmology (national)
- 2012 – present Member of the International Chinese Statistical Association (International)
- 2010 Member of the Academy Health (national)
- 2008 Member of the International Biometric Society (International)
- 2004 Member of the American Public Health Association (national)

COMMITTEES & OTHER ADMINISTRATIVE SERVICES

- 2022 – present Surgical Health Outcomes & Research Enterprise (SHORE) Data Core Leader. URM C Department of Surgery (local)
- 2020 – 2022 Wilmot Community Outreach & Engagement (COE) Committee Data Core Leader. Wilmot Cancer Institute (local)
- 2016 – 2022 Medical Faculty Council, URM C (local)
- 2016 – 2019 Prospective Graduate Student Open House Committee member, URM C Department of Biostatistics and Computational Biology (local)
- 2008 Vice-president of Central Indiana Chapter (local)

EDUCATIONAL CONTRIBUTIONS:

Teaching:

- 2014 – present BST467: Applied Statistics in the Biomedical Sciences (3 credits/year). Graduate students in bioscience and biomedical engineering, UR.
- 2017 BME221: Biomedical Computation & Statistics (4 credits). Guest lecture for biomedical engineering undergraduate students, URM C.
- 2012 – 2014 PM463: Introduction to Mathematical Statistics (3 credits/year). PhD students in the Department of Public Health Sciences, URM C.
- 2012 PM464: Introduction of Linear Regression Analysis (3 credit). PhD students in the Department of Public Health Sciences, URM C.
- 2010 173:161: Introduction to Patient-Oriented Research: Hands-on Data Analysis (3 credits) Graduate students in biomedical areas, medical fellows, and junior Faculty members. University of Iowa School of Medicine
- 2009 BIOS651: Biostatistics I 2009 (3 credits). Graduate students in biomedical areas, medical fellows, and junior Faculty members. Indiana University Purdue University Indianapolis (IUPUI).

- 1997 – 2001 Principles of Biostatistics (4 credits/year) Medical students. Shanghai Fudan University Medical Center, China
- 2000 Clinical Trial Design and Statistical Analysis (1 credit). Medical students. Shanghai Fudan University Medical Center, China

Mentoring:

Graduate Students

- 2020 – present Zijiang Cheng, Ph.D. student Health Services Research. Research mentoring
- 2019 – 2021 Wenhao Guo, Ph.D. student Health Services Research. Research mentoring
- 2017 – 2020 Yunjiao Mao, Ph.D. Health Services Research. Research mentoring
- 2016 – 2020 Yeunkyung Kim, Ph.D. Health Services Research. Thesis mentoring
- 2016 – 2020 Meiling Ying, Ph.D. Health Services Research. Thesis mentoring
- 2013 – 2019 Xi Cen, Ph.D. Health Services Research. Research mentoring
- 2013 – 2016 Micah Segelman, Ph.D. Health Services Research. Research mentoring
- 2011 – 2017 Lauren Campbell, Ph.D. Health Services Research. Research mentoring
- 2010 – 2018 Zhiqiu Ye, Ph.D. Health Services Research. Research mentoring
- 2009 – 2014 Jun Yin, Ph.D. Health Services Research. Research mentoring
- 2011 – 2013 Joyce A Smith, Ph.D. Nursing. PhD thesis advisory committee

Medical Candidate and Resident

- 2021 – 2022 Melissa Holloway, URM MD candidate. Research mentoring

Postdoctoral Fellow

- 2022 – present Anthony Loria, General Surgery Residency Program. SHORE mentee (SMD)
- 2022 – present Chelsea Marin, General Surgery Residency Program. SHORE mentee (SMD)
- 2022 – present Alexa Melucci, General Surgery Residency Program. SHORE mentee (SMD)
- 2022 – 2023 Patrick Donohue, Department of Medicine, Pulmonary Disease and Critical Care (SMD). Research mentoring
- 2021 – 2022 Evelyn Arana, Department of Surgery (SMD). Research mentoring
- 2021 – 2023 Margaret Connolly, Department of Medicine, Pulmonary Disease and Critical Care (SMD). Research mentoring
- 2020 – 2021 Abbas Farrukh, Department of Medicine, Pulmonary Diseases and Critical Care (SMD). Research mentoring
- 2019 – 2021 Lauren Karbach, Department of Orthopaedics (SMD). Research mentoring

Junior Faculty

- 2022 – present Karen Pineda-Solis. Assistant Professor – Department of Surgery (SMD). SHORE mentee
- 2020 – present Katherine Rieth, Assistant Professor – Department of Otolaryngology-Head & Neck Surgery (SMD). Research mentoring
- 2020 – present Francisco Cartujano Barrera. Assistant Professor – Department of Public Health Sciences (SMD). Research mentoring
- 2016 – 2020 Caroline Thirukumaran. Assistant Professor – Department of Orthopaedics, Center for Musculoskeletal Research (SMD). Research mentoring
- 2012 – 2016 Mona Mittal. Assistant Professor – Department of Public Health Sciences (SMD). NIH Career Development (K) Award mentoring
- 2010 – 2011 Helena Laroche. Assistant Professor – Department of Internal Medicine, University of Iowa School of Medicine. Research mentoring
- 2010 – 2011 Matthew Howren. Ph.D. Psychology – Department of Internal Medicine, University of Iowa School of Medicine. Research mentoring

EXTERNAL ADVISORY / HEALTH COUNCILS & RESEARCH REVIEW COMMITTEES

2022-2023 Adhoc reviewer, Health Services: Quality and Effectiveness (HSQE) Study Section, Health Care Delivery and Methodologies Integrated Review Group, National Institute of Health. (national)

EDITORIAL ASSIGNMENTS IN PROFESSIONAL JOURNALS

Editorial Assignments

2021 – present Editor in Chief. Health Services and Outcome Research Methodology (international)
 2019 - present Statistics Reviewer. Circulation (international)
 2017 – 2020 Associate Editor. Health Services and Outcome Research Methodology (international)

Ad hoc reviews for:

Health Services and Outcome Research Methodology, Annals of Applied Statistics, PLoS ONE Journal of Applied Statistics, Communication in statistics – Simulation and Computation, Medical Care, International Journal of Biostatistics, International Journal for Quality in Health Care, Journal of General Internal Medicine, Journal of Thoracic and Cardiovascular Surgery, Nurse Aging, Clinical Experimental Immunology

GRANTS & CONTRACTS:

As Principal Investigator / Co-Principal Investigator

NIH/NIMH (1RF1MH117528-01) PI: Yue Li / Xueya Cai 07/01/2018 – 8/22/2023
 Suicide Death Among Older Adults Receiving Residential Long-Term Care
 Role: Multiple PI Total Cost: \$1,626,390 13% FTE

American Academy of Ophthalmology PI: Xueya Cai 10/01/2018 – 02/29/2020
 Research to Prevent Blindness/American Academy of Ophthalmology Award for IRIS Registry Research
 Role: Principal Investigator Total Cost: \$20,000 5% FTE

Sinyoo Information Technology (Shanghai) Co., LTD PI: Xueya Cai 10/1/2015 – 9/30/2016
 Surgical Outcomes for Cholangiocarcinoma
 Role: Principal Investigator Total Cost: \$20,000 10% FTE

Other Roles

NIH/RFA-AG-20-037 PI: Yue Li 9/1/2020 – 8/31/2023
 Impact of state HCBS generosity on dementia outcomes and disparities
 Role: Co-Investigator 14% FTE

5R42MD010318-03 PI: Cupertino, Ana Paula 7/1/2021 – 03/30/2023
 Latinos Kick Buts: Mobile Engagement and Cessation Support for Latino Smokers Phase II
 Role: Co-Investigator 5% FTE

5R01CA212189-06 PI: Cupertino, Ana Paula 7/1/2021 – 12/31/2022
 e-Decidete: Mobile Cessation Support for Latino Smokers
 Role: Co-Investigator 5% FTE

1U01AI152011-01 PI: Lisa Beck 04/01/2022 – 3/31/2024
 Role: Co-Investigator

Biomarker Identification, Viral Susceptibility and Management in S. Aureus Colonized AD Patients.		
Role: Co-Investigator		10% FTE
5R01NS105479-02	PI: Michael Benetar	09/01/2019 – 08/31/2023
Pre-symptomatic Familial ALS (PRE-FALS) Study – Prelude to a Treatment Trial		
Role: Co-Investigator		15% FTE
Surgical Health Outcome Research Enterprise (SHORE)		
	PI: Paula Cupertino	11/1/2022-present
Role: Lead statistician		25% FTE
Medicine Quality Institute		
Role: Statistician	PI: Irena P. Boyce	7/1/2021 – present
		10% FTE
1R01HS026893-01	PI: Helena Temkin-Greener	07/01/2019 – 04/30/2023
Patient Safety Culture in Assisted Living: Association with Outcomes		
Role: Co-Investigator		5% FTE
Wilmot Cancer Institute		
Role: Statistician	PI: Paula Cupertino	6/1/2020 – 3/1/2021
		15% FTE
NIH (1 R01 MD012422-01)		
	PI: Caroline Thirukumaran	09/20/2017 – 04/30/2021
Impact of Bundled Payment Reforms on Racial and Socioeconomic Disparities in Hip and Knee Replacement Surgeries		
Role: Co-Investigator		15% FTE
SMA Foundation		
	PI: Rabi Tawil	07/01/2012 – 12/31/2020
Pediatric Neuromuscular Clinical Research Network for SMA Clinical Trials		
Role: Co-Investigator		12% FTE
AHRQ (1R01 HS024923-01)		
	PI: Yue Li	09/30/2016 – 06/30/2020
Impact of the State Policies on Nursing Home Patient Safety Culture		
Role: Co-Investigator		25% FTE
Department of Ophthalmology		
	PI: Kyrstal Huxlin	01/01/18 – 12/31/2019
Population Health of Ophthalmology		
Role: Co-Investigator		10% FTE
NIH (5 R01 AG052451-02)		
	PI: Shubing Cai	08/15/16 – 05/31/19
Disparities in Quality of Care for Obese Nursing Home Residents		
Role: Co-Investigator		2% FTE
Department of Orthopedics		
	PI: James Sanders	10/01/2016 – 6/30/2019
Growth of the Spine Children		
Role: Co-Investigator		10% FTE
ACTION 9-account Funds (FDA)		
	PI: Robert Dworkin	07/01/2015- 06/31/2018
Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks (ACTTION) Public-Private Partnership		
Role: Co-Investigator		25% FTE

Veterans Affairs Factors Associated with Institutional Use by Veterans in Home-Based Primary Care Role: Co-Investigator	PI: Tobie Olsan	07/01/15 – 6/30/18 15% FTE
PCORI Improving Palliative and End-of-Life Care in Nursing Homes Role: Co-Investigator	PI: Temkin-Greener	03/01/2013 – 04/30/2017 15% FTE
Surgical Department Long-term Outcomes and Cost of Robotic Abdominal and Thoracic Surgery Role: Co-Investigator	PI: Flemming	07/01/2016 – 06/30/2017 4% FTE
NIH (5R01 HL122424-03) Epithelial Barrier Dysfunction and Mucosal Inflammation in Asthma Role: Co-Investigator	PI: Steve Georas	9/26/2014 – 07/31/2018 5% FTE
Pfizer Simplified Pain Evaluation and Communication Tool utilizing the Electronic Record (SPECTER) Role: Co-Investigator	PI: John Markman	10/1/2015 – 3/31/2018 10% FTE
NIH 5 R01 MD007662-03 Impacts of Nursing Home Competition & State Policies on Disparities in Quality Role: Co-Investigator	PI: Yue Li	07/01/13 – 1/31/17 15% FTE
SHORE Surgical Health Outcome Research Role: Co-Investigator	PI: Katia Noyes	01/01/13 – 8/31/2016 10% FTE
NIH 5R01CA132950-05 Community-Partnered Tobacco Control in Underserved Dominican Republic Communities Role: Co-Investigator	PI: Debbie Ossip	09/01/09-07/31/15 5% FTE
Health Resources and Services Administration (HRSA) The Meliora Project: Advancing Quality in Long Term Care Role: Consultant	PI: Tobie Olsan	1/1/2012 – 12/31/2015 5% FTE
NIH K01 MH080660-03, HIV Prevention among African American Women Who use Substances Role: Co-Investigator	PI: Mittal	10/01/2011 – 4/30/2014 5% FTE
National Pace Association PACE Data Analysis Center Project Role: Co-Investigator	PI: Temkin-Greener	07/01/2012 – 6/30/2014 10% FTE
1R01AG033202, Physician Referral & Mental-Disorder Related Disparities in CABG Quality Role: Co-Investigator	PI: Li	01/01/2012 – 6/30/2013 20% FTE

5R01AG032264, State Nursing Home Technical Assistance Programs: Variation & Impact on Quality Role: Co-investigator	PI: Li	01/01/2012 – 8/31/2013 20% FTE
5 R21 HL102582-02 The Effects of Fish Oil and Aspirin on Cardiovascular Risk in Type 2 Diabetes Role: Biostatistician	PI: Robert Block	06/01/2010 – 05/31/2012 5% FTE
NIH/NINDS R01 NS52619, Coordination and Statistics for CoQ ₁₀ in Huntington's Disease (2CARE) Role: Co-Investigator	PI: McDemott	10/01/2011 – 11/30/2012 15% FTE
5R01HL085347 Cardiac Care in Specialty and General Hospitals Role: Co-investigator	PI: Cram	07/01/2009 – 06/30/2011 30% FTE
NIH K23HL093354-01 Family and Community-Focused Approaches to Improving Diet and Preventing Obesity Role: Co-Investigator	PI: Laroche	07/01/08 – 06/30/11 10% FTE
AHRQ HHS2902006000131 Improving Quality through Health IT: Testing the Feasibility and Assessing the Impact of Using Existing Health IT Infrastructure for Better Care Delivery Role: Co-investigator	PI: Simonaitis	09/28/2007 – 09/30/2009 5% FTE
NIH/NIMH R24 MH080824 Indianapolis Interventions and Practice Research Infrastructure Program Role: Co-investigator	PI: Callahan	04/24/2008 – 03/31/2013 15% FTE
US Dept. of Defense W81XWH-08-2-0040, Post-Traumatic Stress Disorder and Pain Comorbidity in Veterans Role: Co-investigator	PI: Krebs	07/01/2008 – 12/31/2009 10% FTE
5R37AA006460 Structure & Expression of Mammal ALC on Dehydrogenase Genes Role: Co-investigator	PI: Edenberg	09/01/2007 – 08/31/2009 15% FTE
AHRQ 290-04-0015 An Evolving Statewide Indiana Information Infrastructure Role: Co-investigator	PI: Overhage	09/30/2004 – 09/29/2009 10% FTE
R01 MH068009 Adolescents at High Risk for Familial Bipolar Disorder Role: Co-investigator	PI: Nurnberger	03/01/2005 – 02/28/2010 15% FTE
NIH /NIA 1R01AG029884 Alzheimer Screening in Primary Care: PRISM-PC Study Role: Co-investigator	PI: Boustani	09/01/2007 – 08/30/2010 15% FTE
NIH/NIGMS subproject of 5P20GM67650-02, Bayesian Meta-Analysis of Heterogeneous Genomic Data through Hybrid Systems.	PI: Liang	09/01/2004 – 08/31/2005

Role: PhD student researcher 50% FTE

SUBMITTED / OTHER RESEARCH PROJECTS

NIH R01 PI: Yue Li
Nursing home climate resilience and impact of state policies
Role: Co-Investigator 20% FTE

NIH R21 PI: Anthony Loria/Fergal Fleming
Novel research methodologies to study the surgical outcomes of incarcerated individuals
Role: Co-Investigator 10% FTE

NIH PI: Patricia M Rivera / Paula Cupertino
Submitted June 2023

TiMeToAct Mobile Intervention
Role: Co-Investigator 15% FTE

AHRQ R01 PI: Yue Li submitted June 2022
Evaluation of the impact of new federal price transparency requirements for acute-care hospitals
Role: Co-Investigator 25% FTE

Pfizer PI: Anna DeBenedetto Awarded 7/1/2022
Identify Serum Biomarkers and S. Aureus Related Drivers of Atopic Dermatitis Severity
Role: Co-Investigator 10% FTE

AHRQ T32 PI: Yue Li submitted October 2022
Health Services Research and Policy PhD Training Program
Role: Mentor

American Cancer Society PI: Patricia Rivera submitted July 2022
TiMeToAct: Text Messaging to Advance Lung Cancer Screening
Role: Co-Investigator FTE: 15%

NIH PI: Yue Li submitted October 2022
Family Care to Nursing Home Residents and State Essential Caregiver Programs During the COVID-19 Pandemic: Impact on Dementia Care, Outcomes, and Disparities
Role: Co-Investigator

American Cancer Society PI: Patricia Rivera submitted July 2022
Text Messaging To Advance Lung Cancer Screening
Role: Co-Investigator

Clinical Translational Science Institute PI: Martin Zand submitted March 2022
Simulation of Ventilator Allocation Under Different Protocols and Levels of Scarcity
Role: Co-Investigator

NIH PI: Yue Li submitted February 2022
Impact of State and City Labor Market Policies on Racial/Ethnic Disparities in Nursing Home Staffing and COVID-19 and non-COVID-19 Outcomes
Role: Co-Investigator

NIH PI: Helena Temkin Greener submitted June 2021
Patient Safety and COVID-19 outcomes in Assisted Living Communities: Provider and State
Pandemic Responsiveness
Role: Co-Investigator

NIH PI: Paula Cupertino submitted October 2020
Smoking among Puerto Ricans: Cultural and Biopsychosocial Implication on Smoking Cessation
Role: Co-Investigator (re-submission)

NIH PI: Paula Cupertino submitted October 2020
JUNTOS: A Smoking Cessation and Physical Activity Mobile Intervention in Mexico
Role: Co-Investigator

NIH PI: Michael Sohn submitted June 2020
Antipsychotics for Neuropsychiatric Symptoms with Chorea in Huntington's Disease (ANSWER-
HD)
Role: Statistician

NIH PI: Caroline Thirukumaran submitted: March 2020
Impact of Bundle Payment Reforms in Institutional Post-Acute Care Patients among Patients
having Alzheimer's Disease-Related Dementia.
Role: Co-Investigator

NIH PI: Jinjiao Wang / Xueya Cai submitted: February 2020
Suicide Prediction in Home Healthcare Services.
Role: Multiple Principal Investigator

Renal Research Institute, LLC PI: Fahad Saeed submitted: December 2019
Development and Testing of a Hospital Readmission Risk Calculator for Older Adults Receiving
Maintenance Dialysis: A Pilot Study
Role: Co-Investigator

NIH PI: Larry Glance submitted: October 2019
Impact of Medicare Shared Savings Program on Disparities in Cardiovascular Care
Role: Co-Investigator

NIH PI: Jinjiao Wang submitted: October 2019
Impact of Medicare Home Healthcare Value Based Purchasing on Home Health Use, Quality
and Outcomes in Vulnerable Patients.
Role: Co-Investigator

NIH PI: Xueya Cai / Rajeev Ramchandran submitted: June 2018
Vision Health Insights from Analysis of NHATS Linked to Administrative Databases
Role: Multiple Principal Investigator

NIH PI: Zhengqiang Yao submitted January 2019
Target Therapy for Metastatic Breast Cancer
Role: Biostatistics Consultant

American sleep medicine foundation PI: Michael Yurcheshen
Multi-Center, Non-Inferiority Trial Comparing Telemedicine vs. In-Person Management for
Obstructive Sleep Apnea in Rural Populations
Role: Co-Investigator

The Donaghue Foundation PI: Yue Li
Nursing Home safety of care for residents with SMI & substance abuse
Role: Co-Investigator

NIH PI: Steve Georas
Expression of autotaxin (ATX) and lysophosphatidic acid (LPA) in human asthma
Role: Co-Investigator

Scoliosis Research Society PI: James Sanders
Growth of the Spine Children – a Longitudinal, Prospective Investigation.
Role: Co-Investigator

UR CTSI PI: Xueya Cai
Causal Inference in Racial Disparity Studies with Binary Outcomes
Role: Principal Investigator

Intuitive Surgical, Inc. PI: Fergal Fleming
Long-Term Outcomes and Cost of Robotic Abdominal and Thoracic Surgery
Role: Co-Investigator

NIH PI: Shubing Cai
Disparity in Quality of Care for Obese Nursing Home Residents
Role: Co-Investigator

NIH PI: Geoffrey Williams
Tobacco Dependence Treatment Program for Patients at High Risk for Lung Cancer
Role: Co-Investigator

AHRQ PI: Yue Li
Impact of state policies on nursing home patient safety culture
Role: Co-Investigator

NIH PI: Helena Temkin-Greener
Palliative Care Consultations and Health Outcomes: Community Dwelling, Dementia, Nursing
Home & Minority Patients
Role: Co-Investigator

NIH PI: Yue Li
Nursing home organization & work environment: impact on disparity in quality
Role: Co-Investigator

NIH PI: Yue Li
State Medicaid nursing home P4P programs & racial/ethnic disparity in quality
Role: Co-Investigator

CDC
Tobacco Dependence Treatment Program for Patients at High Risk for Lung Cancer.
Role: Co-Investigator

National Institute of Justice (NIJ) PI: Paul Caccamise (LifeSpan)
Detection of Elder Financial Exploration in the Aging Services Network
Role: Co-Investigator

PCORI PI: Christopher Ritchlin
Biosychosocial Intervention for Chronic Diseases
Role: Co-Investigator

NIH PI: Katia Noyes
Does Quality of Care in Colorectal Cancer Mediate Disparity in Outcomes: Developing Quality Indicator
Role: Co-Investigator

NIH R01 PI: Steve N. Georas
Epithelial Barrier Dysfunction and Mucosal Inflammation in Asthma
Role: Co-Investigator
(Awarded but only support a biostatistics programmer due to budget cut)

NIH R01 PI: Yue Li
Medicare mental health parity: impact on service use and spending for schizophrenia
Role: Co-Investigator

NIH R01 PI: Irena Persis-Katz
Clinical management of chronic heart failure in long-term care setting
Role: Co-investigator

NIH R01 PI: Irena Persis-Katz
Improving outcomes for nursing home residence with chronic heart failure
Role: Co-investigator

Orthopaedic Research & Education Foundation (OREF) PI: James O. Sanders
Determination of the best fusion levels in surgical adolescent idiopathic scoliosis
Role: Statistician

NIH R21 PI: Ann Dozier
Infant feeding decision aid
Role: Co-Investigator

NIH R01 PI: Ann Dozier
Community partnership for breastfeeding promotion and support
Role: Co-Investigator

CTSI UL1 PI: Xueya Cai
Interim monitoring of longitudinal outcomes in clinical trials

PRESENTATIONS:

*denote trainee / supervisee

Local, Regional, & State Conferences

- April 2019 **Cai X.** T-text, ANOVA, and Mixed Model. Department of Ophthalmology Resident Workshop. (SMD)
- June 2018 **Cai X.** Grad Stem for All. Nazareth College Minority STEM Camp.
- October 2015 **Cai X.** Biostatistics in Neurosurgery Clinical Research. Neurosurgery workshop. (SMD)
- June 2015 **Cai X.** Biostatistics and Evaluation of Evidence. Department of Surgery Statistics Seminar. (SMD)
- October 2012 **Cai X.** Biostatistics – Statistics in Biomedical Studies. Graduate Student Society (GSS) Professional Development Seminar Series. (SMD)

National & International Conferences

- November 2023 Cheng Z*, Cupertino P, Cai X, Gao S, Li Y. Young Hispanics are more likely to use electronic cigarettes than smoke traditional cigarettes compared to non-Hispanics: Evidence from New York State. American Public Health Association Annual Conference. Atlanta, GA. USA
- June 2023 Cheng Z*, Mutoniwase E, **Cai X**, Li Y. Medicaid support for Home- and Community- Based Services (HCBS) and quality of state long-term services and supports (LTSS). Academy Health. Seattle, WA. USA.
- May 2023 Pineda-Solis K*, Jacobs M, Byrne M, Martens J, **Cai X**. Evaluating the Obesity Paradox in Living Donor Liver Transplantation. The International Congress of the International Liver Transplantation Society (ILTS). Rotterdam, Netherlands
- May 2023 Yoshida T, Gao S, Fahey C, Beck L, **Cai X**, De Benedetto AD. Identification of candidate serum biomarkers for severe atopic dermatitis by proteomic approach. International Societies for Investigative Dermatology Meeting. Tokyo, Japan
- May 2023 Yoshida T, Gao S, Fahey C, Beck LA, **Cai X**, Benedett AD. Olink-based proteomics identifies new serum biomarkers associated with severe atopic dermatitis. International Societies for Investigative Dermatology Meeting. Tokyo, Japan
- May 2023 Connolly M*, Donohue P, **Cai X**, Khurana S, Georas S. Clinical Outcome Correlation of Race Specific versus Race Neutral PFT Z-Scores. American Thoracic Society Annual Meeting. Washington DC, USA
- May 2023 Donohue PA*, Connolly M, **Cai X**, Khurana S, Georas S. Differentiating Inducible Laryngeal Obstruction from Asthma Using Oscillometry. American Thoracic Society Annual Meeting. Washington DC, USA

- May 2023 Khurana S, Kosoy G, Norton K, **Cai X**, Gao S, Miller B, Georas S. Immune Response to COVID-19 Vaccine in Patients on Asthma Biologics. American Thoracic Society Annual Meeting. Washington DC, USA
- April 2023 Connolly M*, Croft D, Ramirez-Palacios P, **Cai X**, Rivera PM, Wilson KM, Mcintosh S, Ossip DJ, Cupertino AP, Cartujano-Barrera F. Are Black and Latino Adolescents Being Asked if They Use Electronic Cigarettes and Advised Not to Use Them? Results from a Community-Based Survey. European Conference on Tobacco or Health (ECToH), Madrid, Spain.
- January 2023 Arana-Chicas E*, Cartujano-Barrera F, **Cai X**, Gao S, Cox LS, Cupertino AP. Biopsychosocial correlates of smoking menthol cigarettes and cessation among Latino smokers. American Association for Cancer Research (AACR) annual conference. Louisiana, USA January 2023
- September 2022 Arana-Chicas E*, Cartujano-Barrera F, **Cai X**, Cox LS, Cupertino AP. Biopsychosocial predictors of smoking menthol cigarettes among Latino smoker. American Association for Cancer Research (AACR) annual conference on the Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved. Pennsylvania, USA
- June 2021 Thirukumaran CP, Kim Y, **Cai X**, Ricciardi B, Li Y, Fiscella K, Mesfin A, Glance LG. Association of the Comprehensive Care for Joint Replacement Model with disparities in the utilization of hip and knee replacements. AcademyHealth Annual Research Meeting. Online/Virtual (podium)
- November 2020 Wang, J., Ying, M., **Cai, X.**, Caprio, T. V., Temkin-Greener, H., & Li, Y. Association Between Living Arrangement and Acute Care Use in Older Medicare Home Health Patients. Paper Presentation. The Gerontological Society of America's 72nd Annual Scientific Meeting. Online/Remote
- June 2020 Li Y, **Cai X**, Gao S, Conwell Y, Simning A, Temkin-Greener H. Attempted Suicide and Self-Inflicted Injury Among US Nursing Home Residents: Resident and Facility Correlates. AcademyHealth Annual Research Meeting. Boston, MA. (podium)
- June 2020 Ying M, Thirukumaran CP, **Cai X**, Li Y. Mandatory Medicare Bundled Payment Program for Lower Extremity Joint Replacement Is Associated with More Efficient Post-Acute Care but Maintained Disparities between Medicare-Only and Dual Eligible Patients. AcademyHealth Annual Research Meeting. Boston, MA. (podium)
- June 2019 Ying M.*, **Cai X**, Li Y. Skilled Nursing Facilities Participating in Medicare Bundled Payments for Care Improvement Show Improved Performance on "Nursing Home Compare" Measures over Time. Academy Health Annual Research Meeting. Washington DC, USA.
- June 2015 Campbell L*, **Cai X**, Gao S, Li Y. Racial/Ethnic Disparities in Nursing Home Quality of Life Deficiencies, 2001-2011. AcademyHealth Annual Research Meeting. Minneapolis, MN. (podium)
- June 2013 Li Y, **Cai X**, Ye Z, Glance L, Harrington C, Mukamel D. Family Satisfaction with Nursing Home Care in Massachusetts. June 2013. AcademyHealth Annual Research Meeting. Baltimore, MD. (poster)

- November 2012 **Cai X**, Li Y. Are AMI patients with comorbid mental illness more likely to be admitted to hospitals with lower quality of AMI care? APHA Annual Meeting . San Francisco, CA. (accepted for oral)
- November 2010 **Cai X**, Cram P, Li Y. Are Nursing Home Patients with Serious Mental Illness Less Likely to Have Advance Care Plans than Other Nursing Home Patients? November 2010. APHA Annual Meeting. Denver, CO. (oral)
- June 2010 **Cai X**, Cram P, Li Y. Medical Advance Care Plan Documents for Nursing Home Patients With and Without Serious Mental Illness. AcademyHealth Annual Research Meeting. Boston, MA. (poster)
- June 2008 Li Y, Glance LG, **Cai X**, Mukamel DB. Mental Illness and Hospitalization for Ambulatory Care Sensitive Medical Conditions. AcademyHealth Annual Research Meeting. Washington DC, USA
- November 2007 Li Y, **Cai X**, Glance LG, Mukamel DB. Urinary Incontinence in Community-Dwelling Older Women: Does Socioeconomic Status Affect Help Seeking and Treatment? APHA Annual Meeting. Washington DC, USA. (Award winner: Susan B. Anthony Aetna Award for Excellence in Research on Older Women and Public Health).
- June 2007 Li Y, **Cai X**, Glance LG, Mukamel DB. Gender Differences in Healthcare-Seeking for Urinary Incontinence and the Impact of Socioeconomic Status: A Study of the Medicare Managed Care Population. AcademyHealth Annual Research Meeting. Florida, USA
- September 2005 Liang Y, **Cai X**, Kelemen A. Bayesian State Space Models for Inferring Gene Interaction Networks. Case Studies in Bayesian Statistics Workshop. Carnegie Mellon University. Pennsylvania, USA
- November 2004 **Cai X.**, Li Y., Gu J.. Effect of Simvastatin Dose Escalation: Results from a Randomized Clinical Trial for Coronary Heart Disease (CHD) Patients with Hyperlipidemia in Mainland China. APHA Annual Meeting. Washington, DC. (poster)

Invited Presentations: Local, Regional, & State

- April 2022 **Cai X**, Gao S, Li Y. Super Learner Prediction and Variable Importance Analyses of Nursing Home Resident Suicide Ideation. UP-STAT, ASA Rochester Chapter. Rochester NY
- April 2016 **Cai X**. Application of Two Stage Residual Inclusion (2SRI) Model in Testing the Impact of Length of Stay on Short-term Readmission Rate. UP-STAT, ASA Rochester Chapter. Rochester NY (session chair)
- April 2015 **Cai X**. Interim Monitoring of Longitudinal Outcomes in Clinical Trials. Department of Biostatistics, SUNY Buffalo
- March 2010 **Cai X**, Cram P, Vaughan-Sarrazin MS. Are Black Patients More likely to Receive Total Knee Arthroplasty in Hospitals With Higher Risk-Adjusted

Complication Rates? University of Iowa Department of Medicine Research Day. Iowa, IA.

May 2004 **Cai X**, Liang Y. Bayesian Approach and Power Analysis for Temporal Gene Expression Data for the Treatment of IFN in Relapsing Multiple Sclerosis Patients. Buffalo Center for Biomedical Computing Retreat/Symposium. Buffalo, NY

Invited Presentations: National & International

March 2021 Saeed F, **Cai X**, Gao S, Temkin-Greener H, Ladwig S, Li Y. Development and Testing of a Hospital Readmission Risk Calculator for Older Adults Receiving Maintenance Dialysis: A Pilot Study. Renal Research Institute 2021 Winter Board Meeting (Remote, speaker)

November 2020 Beck L, Moran MK, Yoshida T, **Cai X**. Biomarker Identification, Viral Susceptibility & Management in S. Aureus Colonized AD Patients. Atopic Dermatitis Research Network (ADRN) Network Steering Committee Virtual Meeting (speaker)

October 2019 **Cai X**. Predictive Model for Risk of Refractive Error Progression in Children and Young Adults. American Academy of Ophthalmology (AAO) Annual Conference. San Francisco, CA

June 2017 **Cai X**, McDermott M, Gewandter J, He H, Dworkin R. Multiple Imputation for Missing Data in Analgesic Clinical Trials using Pattern Mixture Model. International Chinese Statistical Association (ICSA) Applied Statistics Symposium. Chicago, IL

December 2016 **Cai X**. Biostatistics and Evaluation of Evidence. Bellary Tract Surgery Grand Rounds, Zhongshan Hospital of Fudan University, Shanghai, China

July 2014 **Cai X**. Observational Data Analyses for Risk Adjustment. Department of Biostatistics, Fudan University Medical Center. Shanghai, China

June 2012 **Cai X**. An Application of Instrumental Variable Analysis in Testing the Impact of Length of Stay on Short-term Readmission Rate. Second Joint Biostatistics Symposium. Beijing, China

June 2010 **Cai X**, Cram P, Vaughan-Sarrazin MS. Are Black Patients More likely to Receive Total Knee Arthroplasty in Hospitals With Higher Risk-Adjusted Complication Rates? University of Iowa Department of Medicine Research Day. AcademyHealth Annual Research Meeting, Boston, MA

August 2009 **Cai X**, Wilding GE, Hutson A, Li Y. Testing the Equality of Conditional Correlations Across Numeric Variable(s) with Heteroscedastic Data. The Joint Statistical Meeting, Washington DC

March 2008 **Cai X**, Wilding GE, Hutson A. Approaches for Estimating and Testing Conditional Correlations. International Biometric Society, Eastern North American Region annual meeting. Arlington, VA

- March 2007 **Cai X**, Wilding GE, Hutson A. A Generalized Linear Model Based Approach for Estimating and Testing Equality of Conditional Correlations. International Biometric Society, Eastern North American Region annual meeting. Atlanta, GA
- August 2005 **Cai X**, Liang Y. Hierarchical Bayesian Analysis for Temporal Microarray Gene Expression Data. Joint Statistical Meeting. Minneapolis, MN
- November 2004 **Cai X**, Li Y, Gu J. Effect of Simvastatin Dose Escalation: Results from a Randomized Clinical Trial for Coronary Heart Disease (CHD) Patients with Hyperlipidemia in Mainland China. American Public Health Association Annual Meeting. Washington, DC

PUBLICATIONS

*denote trainee / supervisee

Peer-Reviewed Methodological Journal Articles

1. Shi Z, Yu J, **Cai X**. The application of CMH method in categorical data in multi-center clinical trials. *Journal of health statistics in China*. 1999.16(3): 179-80.
2. **Cai X**, Jin P. The method and its limitation to assess agreement using Intraclass Correlation Coefficient (ICC). *Journal of preventive medicine in China*. 1999. 33(3): 175-76.
3. **Cai X**, Jin P. The disadvantage of effective rate analysis in patients with different illness status. *Journal of health statistics in China*. 2000.17(4): 250-51.
4. **Cai X**, Jin P. Estimating the confidence interval of median using Bootstrap sampling. *Journal of health statistics in China*. 2002.19(3): 185-86.
5. Liang Y, Tayo B, **Cai X**, Kelemen A. Differential and trajectory methods for time course gene expression data. *Bioinformatics*. 2005. 21: 3009-3016. PMID: PMC2574001
6. Li Y, Dick AW, Glance LG, **Cai X**, Mukamel DB. Misspecification issues in risk adjustment and construction of outcome-based quality indicators. *Health services & outcomes research methodology*. 2007. 7: 39-56.
7. Wilding GE, **Cai X** (Corresponding Author), Hutson A, Yu Z. A Linear Model Based Test for the Heterogeneity of Conditional Correlations. *Journal of Applied Statistics*, 2011, 38(10): 2355-2366.
8. **Cai X**, Wilding GE, Hutson A, Java J. Estimation and Testing of the Conditional Correlations Across Continuous Variable(s) for Heteroscedastic Data. *Advances and Applications in Mathematical Sciences*. 2012, 10(9): 191-206.
9. Wang D, **Cai X**, Tian, L. Interval Estimation for the Gini Index of Shifted Exponential Distribution under Type-II Double Censoring. *Health Services and Outcomes Research Methodology*. 2015 (15) 69-81.
10. **Cai X**, Gewandter JS, He H, Tuck DC, Dworkin RH, McDermott MP. Estimands and Missing Data in Clinical Trials of Chronic Pain Treatments: Advances in Design and Analysis. *Pain*. 2020 Oct;161(10):2308-2320. PMID: 32453131

11. Wang D, **Cai X**. Smooth ROC curve estimation via Bernstein polynomials. PLoS ONE. 2022 16(5): e0251959. <https://doi.org/10.1371/journal.pone.0251959>. PMID: 34032801
12. **Cai X**, Gao S, Obudzinski S, Sanders J. Dynamic Panel Estimation in Prediction of Child Growth. DOI: 10.19080/BBOAJ.2022.11.555803

Peer-Reviewed Collaboration Journal Articles

13. Fernaays MM, Lesse AJ, Sethi S, **Cai X**, Murphy TF. Differential genome contents of nontypeable Haemophilus influenzae strains from adults with chronic obstructive pulmonary disease. Infection and immunity. 2006. 74:3366-3374. PMCID: PMC1479259
14. Fernaays MM, Lesse AJ, **Cai X**, and Murphy TF. Characterization of igaB, a Second Immunoglobulin A1 Protease Gene in Nontypeable Haemophilus influenzae. Infection and immunity. 2006. 74:5860-5870. PMCID: PMC1594874
15. Murphy TF, Brauer AL, Sethi S, Kilian M, **Cai X**, Lesse AJ. Haemophilus haemolyticus: a human respiratory tract commensal to be distinguished from Haemophilus influenzae. Journal of infectious diseases. 2007. 195:81-89. PMID: 17152011
16. Sethi S, Sethi R, Eschberger K, Lobbins P, **Cai X**, Grant JB, Murphy TF. Airway Bacterial Concentrations and Exacerbations of Chronic Obstructive Pulmonary Disease. American journal of respiratory and critical care medicine. 2007. 176:356-361. PMID: 17478618
17. Li Y, Glance LG, **Cai X**, Mukamel DB. Are Patients with Coexisting Mental Disorders More Likely to Receive CABG Surgery from Low-Quality Cardiac Surgeons? The Experience in New York State. Medical care. 2007. 45:587-593. PMID: 17571006
18. Li Y, **Cai X**, Glance LG, Mukamel DB. Gender Differences in Healthcare-Seeking Behavior for Urinary Incontinence and the Impact of Socioeconomic Status: A Study of the Medicare Managed Care Population. Medical Care. 2007. 45: 1116-1122. PMID: 18049354
19. Sethi S, Wrona C, Eschberger K, Lobbins P, **Cai X**, and Murphy TF. Inflammatory Profile of New Bacterial Strain Exacerbations of Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine. 2008. 177: 491-497. PMID: 18079493
20. Murphy TF, Brauer AL, Eschberger K, Lobbins P, Grove L, **Cai X**, Sethi S. Pseudomonas aeruginosa in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine. 2008. 177: 853-860. PMID: 18202344
21. Li Y, Glance LG, **Cai X**, Mukamel DB. Adverse Hospital Events for Mentally-Ill Patients Undergoing Coronary Artery Bypass Surgery. Health Services Research. 2008. 43(6): 2239-2252. PMCID: PMC2613995
22. Li Y, **Cai X**, Glance LG, Spector WD, Mukamel DB. National Release of the Nursing Home Quality Report Cards: Implications of Statistical Methodology for Risk Adjustment. Health Services Research. 2009. 44(1):79-102. PMCID: PMC2669625
23. Li Y, Glance LG, **Cai X**, Mukamel DB. Mental Illness and Hospitalization for Ambulatory Care Sensitive Medical Conditions. Medical Care. 2008. 12:1249-1256. PMID: 19300315
24. Blekher T, Weaver MR, **Cai X**, Hui S, Marshall J, Jackson GJ, Wojcieszek F, Yee RD, Foroud TM. Test-retest reliability of saccadic measures in subjects at-risk for Huntington

- disease. *Investigative Ophthalmology & Visual Science*. 2009. 50(12): 5707-5711. PMID: 19553607
25. Novotny LA, Adams LD, Kang DR, Wiet GJ, **Cai X**, Sethi S, Murphy TF, and Bakaletz LO. Epitope mapping immunodominant regions of the PilA protein of nontypeable *Haemophilus influenzae* (NTHI) to facilitate the design of two novel chimeric vaccine candidates. *Vaccine*. 2009. 28 (1): 279-289. PMCID: PMC2787809
 26. Cram P, Bayman L, Popescu I, Vaughan-Sarrazin MS, **Cai X**, Rosenthal GE. Uncompensated care provided by for-profit, not-for-profit, and government owned hospitals. *BMC Health Services Research*. 2010. 10(90). PMCID: PMC2907758
<http://www.biomedcentral.com/content/pdf/1472-6963-10-90.pdf>
 27. Li Y, **Cai X**, Mukamel DB, Glance LG. The Volume-Outcome Relationship in Nursing Home Care: An Examination of Functional Decline among Long-Term Care Residents. *Medical Care*. 2010. 48(1): 52-57. PMID: 19890222
 28. Ohl M, Harris A, Nurudtinova D, **Cai X**, Drohobyczer D, Overton ET. Do Brief Screening Questions or Provider Perception Accurately Identify Persons with Low Health Literacy in the HIV Primary Care Setting? *AIDS Patient Care and STDs*. 2010. 24(10): 623-629. PMID: 20858056
 29. Vander Weg MW, Cunningham CL, **Cai X**. Tobacco use and exposure in rural areas: Finding from the behavioral risk factor surveillance system addictive behaviors. *Addictive Behaviors*. 2011, 36: 231-236. PMID: 21146318
 30. **Cai X**, Cram P, Li Y. Origination of Medical Advance Directives Among Nursing Home Residents With and Without Serious Mental Illness. *Psychiatric Services*, 2011. 62:1-6. PMCID: PMC3785002
 31. Li Y, Cram P, **Cai X**. Are patients with serious mental illness more likely to be admitted to nursing homes with more deficiencies in care? *Medical Care*. 2011. 49(4):397-405. PMCID: PMC3784995
 32. Boustani MA, Justiss MD, Frame A, Austrom MG, Perkins AJ, **Cai X**, Sachs GA, Torke AM, Monahan P, Hendrie HC. Caregiver and noncaregiver attitudes toward dementia screening. *J Am Geriatr Soc*. 2011 Apr;59(4):681-6. PMCID: PMC3125691
 33. Cram P, Lu X, Kaboli PJ, Vaughan-Sarrazin MS, **Cai X**, Wolf B, Li Y. Clinical characteristics and outcomes of Medicare patients undergoing total hip arthroplasty, 1991-2008. *JAMA*, 2011, 305(15): 1560-1567. PMCID: PMC3108186
 34. Li Y, **Cai X**, Du H, Glance LG, Lyness JM, Cram P, Mukamel DB. Mentally ill Medicare patients less likely than others to receive certain types of surgery. *Health Aff (Millwood)*. 2011 Jul;30(7):1307-15. doi: 10.1377/hlthaff.2010.1084. PMCID: PMC3784991
 35. Li Y, Yin J, **Cai X**, Temkin-Greener H, Mukamel DB. Association of race and site of care with pressure ulcers in high-risk nursing home residents. *JAMA*. 2011. 306(2):179-186. PMCID: PMC4108174
 36. Howren MB, Vander Weg MW, **Cai X**. Associations of Health-Related Quality of Life with Healthcare Utilization Status in Veterans. *Applied Research in Quality of Life*, 2012 March; 7(1): 83-92

37. Cram P, Lu X, Callaghan J, Vaughan-Sarrazin MS, **Cai X**, Li Y. Long term trends in hip arthroplasty utilization and volume. *Journal of Arthroplasty*. 2012 Feb;27(2):278-285.e2. PMID: PMC3193900
38. Li Y, **Cai X**, Yin J, Glance LG, Mukamel DB. Is higher volume of post-acute care patients associated with a lower rehospitalization rate in skill nursing facilities? *Medical Care Research and Review*. *Med Care Res Rev*. 2012 Feb;69(1):103-18. PMID: PMC3785004
39. **Cai X**, Cram P, Vaughan-Sarrazin MS. Are African American Patients More Likely to Receive a Total Knee Arthroplasty in a Low-quality Hospital? *Clinical Orthopaedics and Related Research*. 2012 Apr; 470(4): 1185-93. PMID: PMC3293986
40. Nurnberger J, McInnis M, Reich W, Kastelic E, Fisher C, Erpe M, Gershon ES, Berrettini W, Laite G, Schweitzer R, Rhoadarmer K, Coleman V, **Cai X**, Azzouz F, Liu H, Monahan P, Wilcox HC. A high-risk study of bipolar disorder: Childhood clinical phenotypes as precursors of major mood disorders. *Archives of General Psychiatry*. 2011 Oct;68(10):1012-20. PMID: PMC4552246
41. Miller BJ, **Cai X**, Cram P. Mortality Rates are Similar after Hip Fractures for Rural and Urban Patients. *Clin Orthop Relat Res*. 2012 Jun;470(6):1763-70. PMID: PMC3348311
42. Vander Weg MW, **Cai X**. Variability in Veterans' Alcohol Use by Place of Residence. *The American Journal of Addictions*. 2012 Jan;21(1):31-7. PMID: 22211344
43. Vander Weg MW, Howren MB, **Cai X**. Use of Routine Clinical Preventive Services among Daily Smokers, Non-daily Smokers, Former Smokers and Never smokers. *Nicotine & Tobacco Research*. 2012 Feb;14(2):123-30. PMID:22180595
44. Cram P, **Cai X**, Lu X, Vaughan-Sarrazin MS, Miller BJ. Total knee arthroplasty outcomes in top-ranked and non-top-ranked orthopedic hospitals: an analysis of Medicare administrative data. *Mayo Clin Proc*. 2012 Apr;87(4):341-8. PMID: PMC3538414
45. Kamath AS, Vaughan Sarrazin M, Vander Weg MW, **Cai X**, Cullen J, Katz DA. Hospital Costs Associated with Smoking in Veterans Undergoing General Surgery. *J Am Coll Surg*. 2012 Jun;214(6):901-8. PMID: 22502993
46. Li Y, **Cai X**, Mukamel DB, Cram P. Impact of length of stay after coronary bypass surgery on short-term readmission rate: An instrumental variable analysis. *Medical Care* 2013 Jan; 51(1):45-51. PMID: PMC3518633
47. Li Y, Glance LG, Lyness JM, Cram P, **Cai X**, Mukamel DB. Mental illness, access to hospitals with invasive cardiac services, and receipt of cardiac procedures in Medicare AMI patients. *Health Serv Res*. 2013 Jun;48(3):1076-95. PMID: PMC3651773
48. **Cai X**, Campbell N, Khan B, Callahan C, Boustani M. Long-term anticholinergic use and the aging brain. *Alzheimer's & Dementia*. 2013 Jul;9(4):377-85. PMID: PMC3674201
49. **Cai X**, Li Y. Are AMI Patients with Comorbid Mental Illness More Likely to be Admitted to Hospitals with Lower Quality of AMI Care? *PLoS ONE* 2013, 8(4): e60258. doi:10.1371/journal.pone.0060258. PMID: PMC3614995
50. Cui J, Zhu M, **Cai X** (co-first author), Liu T, Zhao N. The Efficacy of Bevacizumab Compared with Other Targeted Drugs for Patients with Advanced NSCLC: A Meta-Analysis from 30

Randomized Controlled Clinical Trials. PLoS One. 2013 Apr 16;8(4):e62038. PMID: PMC3628504

51. Block RC, Abdolahi A, Smith B, Meednu N, Thevenet-Morrison K, **Cai X**, Cui H, Mousa S, Brenna JH, Georas S. Effects of low-dose aspirin and fish oil on platelet function and NFkappaB in adults with diabetes mellitus. Prostaglandins Leukot Essent Fatty Acids. 2013 Jul;89(1):9-18. PMID: PMC3683095
52. Laroche HH, Wallace RB, Snetselaar L, Hillis SL, **Cai X**, Steffen LM. Weight Gain among Men and Women Who Have a Child Enter Their Home. J Acad Nutr Diet. 2013. Nov;113(11):1504-10. PMID: PMC3809034
53. Li Y, **Cai X**, Ye Z, Glance LG, Harrington C, Mukamel DB. Satisfaction with Massachusetts nursing home care was generally high during 2005-09, with some variability across facilities. Health affairs (Project Hope).2013;32(8):1416-25. PMID: PMC3784993
54. Korfmacher KS, Suter BJ, **Cai X**, Brownson SA, Dozier AM. Environmental Risks and Children's Health: What can PRAMS Tell Us? Maternal and child health journal. 2013; Matern Child Health J. 2014 Jul;18(5):1155-68. PMID: PMC3926906
55. Schweizer ML; Perencevich EN; Eber MR; Cai X; Shardell MD; Braykov N; Laxminarayan R. Optimizing antimicrobial prescribing: Are clinicians following national trends in methicillin-resistant staphylococcus aureus (MRSA) infections rather than local data when treating MRSA wound infections. Antimicrobial Resistance and Infection Control. 2013 Oct 15; 2(1):28. PMID: PMC3853220
56. Abdolahi A,* Geogas SN, Brenna JT, **Cai X**, Thevenet-Morrison K, Phipps RP, Lawrence P, Mousa S, Block RC. The effects of aspirin and fish oil consumption on lysophosphatidylcholines and lysophosphatidic acids and their correlates with platelet aggregation in adults with diabetes mellitus. Prostaglandins, Leukotrienes & Essential Fatty Acids. 2014 Feb-Mar;90(2-3):61-8. PMID: PMC3939709
57. Li Y, **Cai X**. Racial and Ethnic Disparities in Social Engagement Among US Nursing Home Residents. Med Care. 2014 Apr;52(4):314-21. doi: 10.1097/MLR.000000000000088. PMID: PMC4031618
58. Laroche HH,* Ford C, Hansen K Formerly, **Cai X**, Just DR, Hanks AS, Wansink B. Concession stand makeovers: a pilot study of offering healthy foods at high school concession stands. J Public Health (Oxf). 2015 Mar;37(1):116-24. PMID: PMC4402377
59. Temkin-Greener H, Ladwig S, Caprio T, Norton S, Quill T, Olsan T, **Cai X**, Mukamel DB. Developing palliative care practice guidelines and standards for nursing home based palliative care teams: A Delphi study. Journal of the American Medical Directors Association. J Am Med Dir Assoc. 2015 Jan;16(1):86.e1-7. PMID: 25481748
60. Ossip DJ, Quiñones Z, Diaz S, Thevenet-Morrison K, Fisher S, Holderness H, **Cai X**, McIntosh S., Dozier A, Chin N, Weber E, Sanchez JJ, Bautista A, Almonte H. Tobacco cessation in economically disadvantaged Dominican Republic communities: who are the ex-users? J Smok Cessat. 2016 Dec;11(4):239-249. PMID: PMC5181849
61. **Cai X**, Temkin-Greener H. Nursing Home Admissions Among Medicaid HCBS Enrollees: Evidence of Racial/Ethnic Disparities or Differences? Med Care. 2015 Jul;53(7):566-73. PMID: 26067880

62. Segelman M,* **Cai X**, Van Reenen C; Temkin-Greener H. Transitioning From Community-Based to Institutional Long-term Care: Comparing 1915(c) Waiver and PACE Enrollees. *The Gerontologist*. 2015; Epub 2015 Aug 18. PMID: 26286645
63. Li Y, Temkin-Greener H, You K, **Cai X**, Cen X, Mukamel D. Deficiencies In Care at Nursing Homes And Racial Disparities Across Homes Declined, 2006–11. *Health Aff (Millwood)*. 2015 Jul;34(7):1139-46. PMID: PMC4618506
64. Markman JD, Gewandter JS, Frazer ME, Pittman C, **Cai X**, Patel KV, Jahromi BS, Dworkin RH, Burke LB, Farrar JT. Evaluation of outcome measures for neurogenic claudication: A patient-centered approach. *Neurology*. 2015 Oct 6;85(14):1250-6. PMID: PMC4607594
65. Li Y, **Cai X**, Glance L. Disparities in 30-day rehospitalization rates among Medicare skilled nursing facility residents by race and site of care. *Medical Care*. 2015 Dec;53(12):1058-65. PMID: PMC4648673
66. Li Y, Harrington C, Mukamel DB, Cen X, **Cai X**, Temkin-Greener H. Nurse Staffing Hours At Nursing Homes With High Concentrations Of Minority Residents, 2001-11. *Health Aff (Millwood)*. 2015 Dec;34(12):2129-37. doi: 10.1377/hlthaff.2015.0422. PMID: PMC5066592
67. Gillespie SM, Olsan T, Liebel D, **Cai X**, Stewart R, Katz PR, Karuza J. Pioneering a Nursing Home Quality Improvement Learning Collaborative: A Case Study of Method and Lessons Learned. *J Am Med Dir Assoc*. 2016 Feb;17(2):136-41. PMID: 26420494
68. Blackmore RE, Mittal M, **Cai X**, Moynihan JA, Matthieu MM, O'Connor TG. Lifetime Exposure to Intimate Partner Violence and Proinflammatory Cytokine Levels Across the Perinatal Period. *J Womens Health (Larchmt)*. 2016 Oct;25(10):1004-1013. PMID: PMC5069724
69. Noyes K, Baack-Kukreja J, Messing E, Schoeniger L, Galka E, Pan W, **Cai X**, Fleming F, Monson J, Mohile S, Francone T. Surgical readmissions: Results of integrating pre-, peri-, and post-surgical care. *Nurs Open*. 2016 Jul; 3(3): 168–178. PMID: PMC5047346
70. Mittal M,* Thevenet-Morrison K; Landau J; **Cai X**; Gibson L; Schroeder A; Chaize J; Carey MP. An Integrated HIV Risk Reduction Intervention for Women with a History of Intimate Partner Violence: Pilot Test Results. *AIDS and behavior*. 2017, 21(8): 2219–2232. PMID: PMC6390962
71. Campbell L,* **Cai X**, Gao S, Li Y. Racial/Ethnic disparities in nursing home quality of life deficiencies, 2001-2011. *Gerontol Geriatr Med*. 2016 Jan-Dec; 2: 2333721416653561. Published online 2016 Jun 6. doi: 10.1177/2333721416653561. PMID: PMC5066711
72. Liu H, Cen X, Suo T, **Cai X**, Yuan X, Shen S, Liu H, Li Y. Trends and hospital variations in surgical outcomes for cholangiocarcinoma in New York State. *World Journal of Surgery*. 2017 Feb;41(2):525-537. PMID: 27785554
73. Li Y, Cen Xi, **Cai X**, Wang D, Thirukumaran CP, Glance LG. Does Medicare Advantage Reduce Racial Disparity in 30-Day Rehospitalization for Medicare Beneficiaries? *Medical Care Research and Review*. *Med Care Res Rev*. 2018 Apr;75(2):175-200. PMID: 27927839
74. Ying H, Tang YP, Bao YR, Su XJ, **Cai X**, Li YH, Wang DF. Maternal TSH level and TPOAb status in early pregnancy and their relationship to the risk of gestational diabetes mellitus. *Endocrine*. 2016 Dec;54(3):742-750. PMID: 27423217

75. Katz D., **Cai X**, et. al. Multiple risk factor counseling to promote heart-healthy lifestyles in the chest pain observation unit: Pilot randomized controlled trial. *Acad Emerg Med*. 2017 Aug;24(8):968-982. PMID: 28748625
76. Karuza J, Gillette SM, Olsan T, **Cai X**, Dang S, Intrator O, Li J, Gao S, Kinoshian B, Edes T. National structural survey of veterans affairs home-based primary care program. *JAGS*. 2017 Dec;65(12):2697-2701. PMID: 28960236
77. Li Y, Cen X, **Cai X**, Thirukumaran CP, Zhou J, Glance LG. Medicare Advantage Associated With More Racial Disparity Than Traditional Medicare For Hospital Readmissions. *Health Aff (Millwood)*. 2017 Jul 1;36(7):1328-1335. PMID: 28637771
78. Smith JA,* Fuino RL, Pesis-Katz I, **Cai X**, Powers B, Frazer M, Markman JD. Differences in opioid prescribing in low back pain patients with and without depression: a cross-sectional study of a national sample from the United States. *Pain Rep*. 2017 Jun 22;2(4):e606. doi: 10.1097/PR9.0000000000000606. eCollection 2017 Jul. PMID: 29392221
79. Temkin-Greener H, Mukamel DB, Ladd H, Ladwig S, Caprio TV, Norton SA, Quill TE, Olsan TH, **Cai X**. Impact of Nursing Home Palliative Care Teams on End-of-Life Outcomes: A Randomized Controlled Trial. *Med Care*. 2018 Jan;56(1):11-18. PMID: 29068904
80. Tempkin-Greener H, Campbell L, Hasselberg, MJ, **Cai X**, Li Y. Are post-acute patients with behavior health disorders admitted to lower quality nursing homes? *Am J Geriatr Psychiatry*. 2018 Jun;26(6):643-654. PMID: 29576229
81. Li Y, **Cai X**, Harrington C, Hasselberg M, Conwell Y, Cen X, Temkin-Greener H. Racial and Ethnic Differences in the Prevalence of Depressive Symptoms Among U.S. Nursing Home Residents. *Journal of Aging and Social Policy*. 2018 Jun 8:1-19. PMCID: PMC6286687
82. Gewandter JS, Frazer M, **Cai X**, Chido V, Rast S, Dugan M, Carter H, Rahman R, Stone J, Markman J. Extended-release gabapentin for failed back surgery syndrome: Results from a randomized double-blind cross-over study. *Pain*. 2019 May;160(5):1029-1036. PMID: 30624344
83. Temkin-Greener H, Szydlowski J, Intrator O, Olsan T, Karuza J, **Cai X**, Gao S, Gillespie S. Perceived Effectiveness of Home-Based Primary Care Teams in Veterans Health Administration. *Gerontologist*. 2020 Apr 2;60(3):494-502. doi: 10.1093/geront/gny174. PMID: 30657887
84. Thirukumaran CP, Glance LG, **Cai X**, Balkisson R, Mesfin A, Li Y. Performance Of Safety-Net Hospitals In Year 1 Of The Comprehensive Care For Joint Replacement Model. *Health Aff (Millwood)*. 2019 Feb;38(2):190-196. PMCID: PMC6446900
85. Gewandter JS, McDermott MP, He H, Gao S, **Cai X**, Farrar JT, Katz NP, Markman JD, Senn S, Turk DC, Dworkin RH. Demonstrating heterogeneity of treatment effects among patients: an overlooked but important step toward precision medicine. *Clin Pharmacol Ther*. 2019 Jul;106(1):204-210. PMID: 30661240
86. Thirukumaran CP,* Glance L, **Cai X**, Kim Y, Li Y. Penalties and rewards for safety-net versus non-safety-net hospitals in first 2 years of the Comprehensive Care for Joint Replacement Model. *JAMA*. 2019 May 28;321(20):2027-2030. PMCID: PMC6547113

87. Li Y, Cen X, **Cai X**, Temkin-Greener H. Perceived patients safety culture in nursing home associated with "Nursing Home Compare" performance indicators. *Medical Care*. 2019 Aug; 57(8): 641-47. PMID: PMC6625881
88. Li Y, **Cai X**, Wang M. Social media ratings of nursing homes associated with experience of care and "Nursing Home Compare" quality measures. *BMC Health Serv Res*. 2019 Apr 27;19(1):260. PMID: PMC6487046
89. Oh JH, Shelly M, Nersinger S, **Cai X**, Olsan T. Implementing clinical practice guidelines for replacing peripheral intravenous catheters. *Journal of Nursing Care Quality*. *J Nurs Care Qual*. 2019 Jul 8. *J Nurs Care Qual*. 2020 Apr/Jun;35(2):108-114. doi: 10.1097/NCQ.0000000000000429. [Epub ahead of print]. PMID: 31290781
90. Dang S, Olsan T, Karuza J, **Cai X**, Gao S, Intrator O, Li J, Gillespie SM. Telehealth in Home-Based Primary Care: Factors and Challenges Associated With Integration Into Veteran Care. *J Am Geriatr Soc*. 2019, doi:10.1111/jgs.16045. *J Am Geriatr Soc*. 2019 Sep;67(9):1928-1933. doi: 10.1111/jgs.16045. Epub 2019 Jul 25. PMID: 31343732
91. Thirukumaran CP, McGarry BE, Glance LG, Ying M, Ricciardi BF, **Cai X**, Li Y. Impact of Hospital Readmissions Reduction Program Penalties on Hip and Knee Replacement Readmissions: Comparison of Hospitals at Risk of Varying Penalty Amounts. *J Bone Joint Surg Am*. 2020 Jan 2;102(1):60-67. doi: 10.2106/JBJS.18.01501.PMID:31613862
92. Li Y, Ying M, **Cai X**, Kim Y, Thirukumaran CP. Trends in Postacute Care Use and Outcomes After Hip and Knee Replacements in Dual-Eligible Medicare and Medicaid Beneficiaries, 2013-2016. *JAMA Netw Open*. 2020 Mar 2;3(3):e200368. doi: 10.1001/jamanetworkopen.2020.0368. PMID: 32129866
93. Zhang H, Moisini I, Ajabnoor RM, Turner BM, D'aguilar M, **Cai X**, Gao S, Yang Q, Wang X, Schiffhauer L, Hicks DG. Frequency, Clinicopathologic Characteristics, and Follow-up of HER2-Positive Nonpleomorphic Invasive Lobular Carcinoma of the Breast. *American journal of clinical pathology*. 2020 Apr 15;153(5):583-592. doi: 10.1093/ajcp/aqz194. PMID:31786600
94. Wang J,* Yu F, **Cai X**, Caprio TV, Li Y. Functional Outcome in Home Health: Do Racial and Ethnic Minority Patients with Dementia Fare Worse? *PLoS One*. 2020 May 26;15(5). PMID: 32453771
95. Li Y, Temkin-Greener H, Gao S, **Cai X**. COVID-19 infections and deaths among Connecticut nursing home residents: facility correlates. *J Am Geriatr Soc*. 2020 Jun. 2020 Sep;68(9):1899-1906. doi: 10.1111/jgs.16689. Epub 2020 Jul 21. PMID: 32557542
96. Wang, J,* Monroe, T. B., Simning, A., Conwell, Y., Caprio, T. V., **Cai, X.**, Temkin-Greener, H., Muench, U., Yu, F., Ge, S., & Li, Y. Pain Management in Home Health Care: Relationship with Dementia and Facility Admissions. *Pain Manag Nurs*. 2020 Jul 14:S1524-9042(20)30146-6. PMID: 32680825
97. Ying M, Thirukumaran C, **Cai X**, Li Y. Medicare: Mandatory Medicare Bundled Payment Program for Lower Extremity Joint Replacement Is Associated with More Efficient Postacute Care but Maintained Disparities Between Medicare-Only and Dual-Eligible Patients. *Health Services Research*. 2020 August.55(51): 95-95. <https://doi.org/10.1111/1475-6773.13465>. PMID: PMC7440407

98. Wang J,* Caprio TV, Temkin-Greener H, **Cai X**, Simning A, & Li Y. Relationship of Medicare-Medicaid dual eligibility and dementia with unplanned facility admissions among Medicare home health care recipients. *Journal of Aging and Health*. J Aging Health. 2020 Oct;32(9):1178-1187. doi: 10.1177/0898264319899211. PMID: 31941400
99. Xue Y, Mullaney T, Smith B, **Cai X**, Spetz J. Scope-of-Practice Regulation and Nurse Practitioners as Usual Source of Care Providers. *Journal of Nursing Regulations*. 2020. 11(3): 13-21
100. Temkin-Greener H, Mao Y, Ladwig S, **Cai X**, Zimmerman S, Li Y. Variability and Potential Determinants of Assisted Living State Regulatory Stringency. *J* 2021 Aug;22(8):1714-1719.e2. PMID: 33246841
101. Li Y, Cen X, **Cai X**, Temkin-Greener H. Racial and Ethnic Disparities in COVID-19 Infections and Deaths Across U.S. Nursing Homes. *J Am Geriatr Soc*. 2020 Nov;68(11):2454-2461. doi: 10.1111/jgs.16847. PMID: 32955105
102. Temkin-Greener H, Guo W, Mao Y, **Cai X**, Li Y. COVID-19 Pandemic in Assisted Living Communities: Results from Seven States. *JAGS*. 2020 Sept. *J Am Geriatr Soc*. 2020 Dec;68(12):2727-2734. doi: 10.1111/jgs.16850. Epub 2020 Oct 7. PMID: 32955107.
103. Thirukumaran CP, **Cai X**, Glance LG, Kim Y, Ricciardi BF, Fiscella KA, Li Y. Geographic Variation and Disparities in Total Joint Replacement Use for Medicare Beneficiaries: 2009-2017. *J Bone Joint Surg Am*. 2020 Dec 16;102(24):2120-2128. doi: 10.2106/JBJS.20.00246. PMID: 33079898
104. Li Y, Ying M, **Cai X**, Thirukumaran CP. Association of mandatory bundled payments for joint replacement with post-acute care outcomes among Medicare and Medicaid dual eligible patients. *Med Care*. 2021 Feb 1;59(2):101-110. doi: 10.1097/MLR.0000000000001473. PMID: 33273296
105. Sanders J, Karbach LE, **Cai X**, Gao S, Liu RW, Cooperman DR. Height and Extremity-Length Prediction for Healthy Children Using Age-Based Versus Peak Height Velocity Timing-Based Multipliers. *The Journal of Bone and Joint Surgery*: February 17, 2021 - Volume 103 - Issue 4 - p 335-342. doi: 10.2106/JBJS.20.00040. PMID: 33323887
106. Li Y, Cheng Z, **Cai X**, Mao Y, Temkin-Greener H. Association of state social distancing restrictions with nursing home COVID-19 and non-COVID-19 outcomes. 2021 Feb. 11;2021.02.08.21251382. doi: 10.1101/2021.02.08.21251382. PMID: 33594372
107. Thirukumaran CP, Kim Y, **Cai X**, Ricciardi BF, Li Y, Fiscella KA, Mesfin A, Glance LG. Association of the comprehensive care for joint replacement model with disparities in the use of total hip and total knee replacement. *JAMA Network Open*. 2021;4(5): e2111858. doi:10.1001/jamanetworkopen.2021.11858. PMID: 34047790
108. Li Y, **Cai X**, Mao Y, Cheng Z, Temkin-Greener H. Trends in racial and ethnic disparities in coronavirus disease 2019 (COVID-19) outcomes among nursing home residents. 2022 Aug;43(8):997-1003. doi: 10.1017/ice.2021.246. Epub 2021 Jun 16. PMID: 34130766
109. Liu L, Consagra W, **Cai X**, Mathias A, Worster A, Ma J, Rock P, Kwong T, Kavsak PA. Sex-Specific Absolute Delta Thresholds for High-Sensitivity Cardiac Troponin T Assay. *Clinical Chemistry* 68 (3): 1-9, 2021. PMID: 34871358. DOI: [10.1093/clinchem/hvab230](https://doi.org/10.1093/clinchem/hvab230)

110. Abbas F,* Georas S, **Cai X**, Khurana S. Asthma biologics: Real-world Effectiveness, Impact of Switching Biologics, and Predictors of Response. *Ann Allergy Asthma Immunology* 000. 2021: 1-6. <https://doi.org/10.1016/j.anai.2021.08.416> PMID: 33276116
111. Holloway M,* **Cai X**. Simning A. Cheng Z. Li Y. Changes in income and household spending during early months of COVID-19 pandemic reveal racial and ethnic disparities among older adults. *HPHR Journal (Formerly Harvard Public Health Review)*. 2021;48. PMID: 35935036
112. Temkin-Greener H, Mao Y, Ladwig S, **Cai X**, Zimmerman S, Li Y. Variability and Potential Determinants of Assisted Living State Regulatory Stringency. *J J Am Med Dir Assoc*. 2021 Aug;22(8):1714-1719. PMID: 33246841
113. Thirukumaran CP, Ricciardi BF, **Cai X**, Holloway RG, Li Y, Glance LG. Association of Medicare Mandatory Bundled Payment Reform With Joint Replacement Surgery Use for Beneficiaries With Alzheimer Disease and Related Dementias. *JAMA Health Forum*. 2022;3(2):e215111. doi:10.1001/jamahealthforum.2021.5111. PMID: 35977279
114. Li Y, Cheng Z, **Cai X**, Holloway M, Maeng D, Simming A. Lonely older adults are more likely to delay or avoid medical care during the COVID-19 pandemic. *Journal: International Journal of Geriatric Psychiatry*. 2022 Feb;37(3). DOI: [10.1002/gps.5694](https://doi.org/10.1002/gps.5694). PMID: 35170782
115. Cartujano-Barrera F, Hernández-Torres R, Orfin RH, Chávez-Iñiguez A, Lopez OA, Azogini C, Bermudez D, Arana-Chicas E, **Cai X**, McIntosh S, et al. Proactive and Reactive Recruitment of Black and Latino Adolescents in Vaping Prevention Randomized Controlled Trial. *Children*. 2022. 9(7), 937-48. DOI: [10.3390/children9070937](https://doi.org/10.3390/children9070937). PMID: 35883921
116. Cartujano-Barrera F, Hernández-Torres R, **Cai X**, Orfin RH, Azogini C, Chávez-Iñiguez, A, Santa Cruz E, Bansal-Travers M, Wilson KM, McIntosh S, Ossip DJ, Cupertino AP. Evaluating the Immediate Impact of Graphic Messages for Vaping Prevention among Black and Latino Adolescents: A Randomized Controlled Trial. *Int. J. Environ. Res. Public Health* **2022**, *19*, 10026. <https://doi.org/10.3390/ijerph191610026>. PMID: 36011661
117. Liu L, **Cai X**, Corsetti M, Love T, Kwong T, Mathias A. Analysis of the Effects of High-Sensitivity Cardiac Troponin Confounding Factors on AMI Diagnosis. *American Journal of Clinical Pathology*, 2022. 158(S1): S20–S21, <https://doi.org/10.1093/ajcp/aqac126.036>
118. Liu L, **Cai X**, Love T, Coretti M, Mathias AM, Worster A, Ma J, Kavsak PA. Using logistic regression models to investigate the effects of high-sensitivity cardiac troponin T confounders on ruling in acute myocardial infarction. *Clin Chem Lab Med*. 2023 Jan 26. PMID: 36698327
119. Connolly MJ*, Donohue PA, Palli, Khurana S, **Cai X**, Georas SN. Diagnostic Impact of a Race-Composite Pulmonary Function Test Results Interpretation Strategy, CHEST, 2023, ISSN 0012-3692, <https://doi.org/10.1016/j.chest.2023.06.011>.
120. Connolly M*, Croft D, Ramírez-Palacios P, Cai X, Hill B, Orfin RH, Rivera MP, Wilson KM, Li D, McIntosh S, Ossip DJ, Cupertino AP, Cartujano-Barrera F. Are Black and Latino Adolescents Being Asked if They Use Electronic Cigarettes and Advised Not to Use Them? Results from a Community-Based Survey. 2023, August 10. *Sec. Substance Use Disorders and Behavioral Addictions*. Volume 11 - 2023 | <https://doi.org/10.3389/fpubh.2023.1222184>

121. Xue, Y., Cai, X., & Poghosyan, L. (2023). Geriatric Nurse Practitioner Supply and State Scope-of-Practice Laws. *Journal of Nursing Regulation*, 14(3), 4-13.
122. Loria AP*, **Cai X**, Gao S, Li Y, Cupertino P, Fleming F. Predicting Recurrence and Mortality in Older Adults with Sigmoid Volvulus Following the Initial Episode of Non-Operative Management. *Colorectal Disease*. (submitted)

Books, Monographs, Chapters, & Reviews

123. **Cai X**. Agreement analysis. In: Jin P, et. al. *Medical statistical methods*. Second edition. Series of public health and preventive medicine. Shanghai: Fudan Press. 2004.
124. **Cai X**. Nonparametric data analysis using CMH method. In: Liu Q, Jin P, et. al. *Categorical data analysis and SAS programming*. Shanghai: Fudan Press. 2002.

Letters, Editorials, & Other Publications

125. **Cai X**. Editorial. *Health Services and Outcome Research Methodology*. 2021. 21: 167-168