

DIANQIN SUN

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Dr. Molewaterplein 40, 3015 GD Rotterdam

EDUCATION

- 10/2022-Present **Erasmus University Medical Center**, Netherlands
PhD, Public Health (screening section)
- 9/2019-6/2022 **Peking Union Medical College (Tsinghua University)**, China
MMed, Epidemiology and Health Statistics, **GPA: 4.00/4.00**
Dissertation: “*Reducing social inequalities in gastric cancer from primary prevention to cancer screening.*”
- 9/2014-6/2019 **Capital Medical University**, China
MBBS, Preventive Medicine, **GPA: 3.93/4.00**

GRANTS AND HONORS

- 2023 Moti L. & Kamla Rustgi International Travel Award
American Gastroenterological Association
- 2020-2021 First Class Scholarship; Second Class Scholarship
Peking Union Medical College
- 2019 Best Undergraduate Thesis Award
School of Public Health, Capital Medical University
- 2017 Climate Adaptation Youth Intervention Program Grant
China Youth Leaders Foundation
- 2015-2019 First Class Scholarship; Second Class Scholarship; Outstanding Student Leader
Capital Medical University
- 2015 First Prize, 32nd National Physics Competition for College Students
Beijing Physical Society

RESEARCH EXPERIENCE

- 10/2022-Present **Department of Public Health, Erasmus University Medical Center, Netherlands**
Junior Researcher Scholar with Prof. Iris Lansdorp-Vogelaar
Optimizing Gastric Cancer Control Strategies: Evidence from Epidemiologic and Simulation Studies
 - Impact of nationwide gastric cancer screening in South Korea and Japan (first author, *Gastroenterology*. 2023)
- 9/2019-6/2022 **National Cancer Center, China**
Graduate Student Researcher with Prof. Wanqing Chen
Reducing social inequalities in gastric cancer from primary prevention to cancer screening
 - Examined sociodemographic disparities in gastric cancer and the gastric precancerous cascade (first author, *Lancet Reg Health West Pac*, 2022)

- Applied causal mediation analysis to identify intervention targets for reducing social inequalities in gastric cancer (work in progress)
- Evaluated the improvement in performance and equity of the gastric cancer prediction model compared with the screening criteria of “Expert Consensus” (work in progress)

Cancer transitions in China and the world

- Identified global patterns of cancer transitions using the latent class modelling approach (joint first author, *Int J Cancer*, 2023)
- Summarized the trend of cancer burden in China (first author, *Chin J Cancer Res*, 2020; *Cancer Biol Med*, 2020)

12/2017-6/2019

Department of Child, Adolescent Health and Maternal Care, Capital Medical University

Research Assistant with Prof. Yifei Hu

Awareness of influenza vaccination among pregnant women and their obstetricians in Beijing

- Investigated factors that might influence the willingness of pregnant women to accept influenza vaccine and the willingness of obstetricians to recommend these vaccines (joint first author, *Hum Vaccin Immunother*, 2019)

9/2017-6/2019

Department of Epidemiology and Health Statistics, Capital Medical University

Research Assistant with Prof. Lixin Tao and Prof. Ling Zhang

Cognitive and mental health in old adults

- Investigated the association between superoxide dismutase activity and risk of cognitive decline (first author, *Exp Gerontol*, 2019)
- Examined the effect of serum 25(OH)D levels on depression in older adults using meta-analysis (joint first author, *Am J Geriatr Psychiatry*, 2019)

The health effect of ambient air pollution

- Assessed the association between fine particulate matter exposure and the progression of arterial stiffness (first author, *Environ Health*, 2021)
- Investigated the association between ambient air pollution and mortality among children aged under five years using generalized additive models (third author, *Environ Res*, 2019)

RELATED PROFESSIONAL EXPERIENCE

6/2021-Present

MediecoGroup.com, China

Columnist

- Drafted online articles to introduce epidemiologic methods (e.g., *target trial emulation* and *time-related biases*)
- Gave talks at Pfizer internal workshops to introduce target trial emulation

4/2020-6/2021

Working Group for drafting Cancer Screening Guidelines, National Cancer Center, China

Member

- Reviewed literature and drafted the *Risk and Protective Factors* section for the *Colorectal Cancer Screening Guideline of China*

7/2018-10/2018

Dongcheng District CDC, Beijing, China

Internship

- Conducted health education in communities and schools

- Participated in the residents' dietary survey
- Analyzed data from the HIV sentinel surveillance system

4/2017-7/2017 **Beijing Anzhen Hospital, the National Clinical Research Center for Cardiovascular Diseases, China**

Clinical Internship

- Received training in pediatric medicine, obstetrics and gynecology, internal medicine, surgery

LEADERSHIP

9/2019-8/2020 **Epidemiology Student Association, PUMC**

Executive President

- Organized and led graduate students to promote proper methods in health research
- Managed 10 public seminars in *Real-World Evidence*; Taught ***use of DAGs in health research*** in one seminar
- Managed the club's social media account and convened epidemiology students to draft educational articles

10/2019-9/2020 **Department of Academics, Cancer Hospital Graduate Student Association, PUMC**

Director

- Organized *New Student Seminars*
- Assisted in the organization of *New Year's Gala*

CONFERENCE PAPERS

The effect of nationwide organized cancer screening programs on gastric cancer mortality: a synthetic control study. **Oral Presentation, Plenary Session, *Digestive Disease Week***, Chicago, May 2023.

The contribution of health behaviors to educational inequalities in gastric high-grade dysplasia and gastric cancer. **Poster Presentation, *World Congress of Epidemiology*, virtual/Australia, September, 2021.**

PUBLICATIONS

Peer-reviewed Research Articles (*equal effort)

Sun D, Mülder DT, Li Y, Nieboer D, Park JY, Suh M, Hamashima C, Han W, O'Mahony JF, Lansdorp-Vogelaar I. The Effect of Nationwide Organized Cancer Screening Programs on Gastric Cancer Mortality: a Synthetic Control Study. *Gastroenterology*. 2023 Nov 24.

Yang F*, **Sun D***, Ding C*, Xia C, Li H, Cao M, Yan X, He S, Zhang S, Chen W. Global patterns of cancer transitions: A modelling study. *International Journal of Cancer*. 2023 Nov 1;153(9):1612-22.

Sun D*, Lei L*, Xia C, et al. Sociodemographic disparities in gastric cancer and the gastric precancerous cascade: A population-based study. *The Lancet Regional Health–Western Pacific*. 2022 Jun 1;23.

Sun D, Liu Y, Zhang J, Liu J, Wu Z, Liu M, Li X, Guo X, Tao L. Long-term effects of fine particulate matter exposure on the progression of arterial stiffness. *Environmental Health*. 2021;20(1):2.

Sun D, Cao M, Li H, Ren J, Shi J, Li N, Chen W. Risk of prostate cancer in men with HIV/AIDS: a systematic review and meta-analysis. *Prostate Cancer and Prostatic Diseases*. 2021;24(1):24-34.

Sun D, Cao M, Li H, He S, Chen W. Cancer burden and trends in China: a review and comparison with Japan and South Korea. *Chinese Journal of Cancer Research*. 2020;32(2):129-139.

Li H*, **Sun D***, Wang A, Pan H, Feng W, Ng C H, Ungvari G S, Tao L, Li X, Wang W, Xiang Y T, Guo X. Serum 25-hydroxyvitamin D levels and depression in older adults: a dose-response meta-analysis of prospective cohort studies. *American Journal of Geriatric Psychiatry*. 2019;27(11):1192-1202.

Wang J*, **Sun D***, Abudusaimaiti X, Vermund SH, Li D, Hu Y. Low awareness of influenza vaccination among pregnant women and their obstetricians: a population-based survey in Beijing, China. *Human Vaccines & Immunotherapeutics*. 2019;15(11):2637-2643.

Sun D, Sun X, Xu Y, Wu T, Tao L. Superoxide dismutase activity and risk of cognitive decline in older adults: findings from the Chinese Longitudinal Healthy Longevity Survey. *Experimental Gerontology*. 2019;118:72-77.

Wang J*, Cao H*, **Sun D**, Qi Z, Guo C, Peng W, Sun Y, Xie Y, Liu X, Li B, Luo Y, Pan Y, Li Y, Zhang L. Associations between ambient air pollution and mortality from all causes, pneumonia, and congenital heart diseases among children aged under 5 years in Beijing, China: a population-based time series study. *Environmental Research*. 2019;176:108531.

Chen W*, Li H*, Zheng R, Ren J, Shi J, Cao M, **Sun D**, Sun X, Cao X, Zhou J, Luo P, Wang J, Ma H, Shao T, Zhao C, He S, Sun D, Xu Y, Wu P, Zeng H, Li J, He J. An initial screening strategy based on epidemiologic information in esophageal cancer screening: a prospective evaluation in a community-based cancer screening cohort in rural China. *Gastrointestinal Endoscopy*. 2021;93(1):110-118.e112.

Cao M, Li H, **Sun D**, Lei L, Ren J, Shi J, Li N, Peng J, Chen W. Classifying risk level of gastric cancer: evaluation of questionnaire-based prediction model. *Chinese Journal of Cancer Research*. 2020;32(5):605-613.

Li H, Zeng H, Zheng R, Zou X, Cao M, **Sun D**, Zhou J, Luo P, Jia S, Zha Z, Wang J, Ma H, Sun X, Cao X, Feng S, Fan L, Shi J, Chen W. Association of cancer awareness levels with the risk of cancer in rural China: a population-based cohort study. *Cancer*. 2020;126(20):4563-4571.

Reviews, Commentaries and Other Publications

He S, **Sun D***, Li H, et al. Real world practice of gastric cancer prevention and screening calls for practical prediction models. *Clin Transl Gastroenterol*. 2022

Li H, **Sun D***, Cao M, et al. Risk prediction models for esophageal cancer: A systematic review and critical appraisal. *Cancer Medicine*. 2021;10(20):7265-7276.

Sun D, Li H, Cao M, He S, Lei L, Peng J, Chen W. Cancer burden in China: trends, risk factors and prevention. *Cancer Biology & Medicine*. 2020;17(4):879-895.

Cao M, Li H, **Sun D**, He S, Yu Y, Li J, Chen H, Shi J, Ren J, Li N, Chen W. Cancer screening in China: The current status, challenges, and suggestions. *Cancer Letters*. 2021;506:120-127.