EDUCATION

Postdoctoral Scholar, The James - Ohio State University Comprehensive Cancer Center (OSUCCC), Center for Tobacco Research, Sep. 2020 – present

Ph.D. in Economics, The Graduate Center, City University of New York (CUNY), Sep. 2020

M.A. in Economics, Miami University of Ohio, Dec. 2017

B.A. in Economics, Shandong University, China, Jun. 2013

RESEARCH INTERESTS

Health Economics, Public Policy, Substance Use, Health Disparities, LGBTQ Health

PEER-REVIEWED PUBLICATIONS

Ma, S., Oiu, Z., Yang, O., Bridges, J., Chen, J. & Shang, C. (2022). Expanding E-liquid Flavor Wheel: Classification of Emerging E-Liquid Flavors in Online Vape Shops. International Journal of Environmental Research and Public Health, 19(21). DOI: 10.3390/ijerph192113953

Ma, S., Jiang, S., Ling, M., Chen, J. & Shang, C. (2022). Price Promotions of E-liquid Products Sold in Online Stores. International Journal of Environmental Research and Public Health, 19(14). DOI: 10.3390/ijerph19148870

Ma, S., Jiang, S., Ling, M., Lu, B., Chen, J. & Shang, C. (2022). Excise taxes and pricing activities of e-liquid products sold in online vape shops. Tobacco Control. DOI: 10.1136/tobaccocontrol-2021-057033

Shang, C., Ma, S., & Lindblom, E. N. (2021). Tax incidence of electronic nicotine delivery systems (ENDS) in the USA. Tobacco Control. DOI: 10.1136/tobaccocontrol-2021-056774

Shi, H., Fan, M., Zhang, H., Ma, S., Wang, W., Yan, Z., Chen, Y., Fan, H. & Bi, R. (2021). Perceived healthcare quality in China: a comparison of second-and third-tier hospitals. International Journal for Quality in Health Care, 33(1). DOI: 10.1093/intqhc/mzab027

SELECTED WORKING PAPERS

Ma, S., Jiang, S., Wagener, T., Mays, D., Chen, J. & Shang, C. (2022). Associations Between E-Liquid Pricing and Product Characteristics: Evidence from Online Vape Shops.

Yang, Q., Ma, S., He, Y., Qiu, Z., Chen, J. & Shang, C. (2022). What product attributes contribute to price promotion of e-liquids sold in online stores?

Ma, S., Qiu, Z., Chen, J. & Shang, C. (2022). Synthetic nicotine e-liquids in online vape shops.

Ma, S., Ling, M., Li, R., Jiang, S., Liu, J., Fu, Y., Zhang, Y., Qiu, Z., Chen, J. & Shang, C. (2022). DeepTobaccoWorks: An Application of Natural Language Processing (NLP) in Tobacco Research.

SELECTED WORKS IN PROGRESS

Ma, S., Shang, C., Pechacek, T. & Weaver S. (2022). The Impacts of Product Characteristics and Regulatory Environment on Smokers' Preferences for Tobacco and Alcohol Co-Use: Evidence from A Volumetric Choice Experiment.

Ma, S., Mirza, M., Schuster, A., Bridges, J. & Shang, C. (2022). A Systematic Review of The Effects of Public Policies on Tobacco, Alcohol, And Marijuana Use Among LGBTQIA+ Populations.

Ma, S., Ling, M., Chen, J., & Shang, C. (2022). Applying Natural Language Processing (NLP) Tools to Assess LGBTQ Research Gaps in Tobacco Control Literature.

Ma, S., Hernandez, G., Qiu, Z., Mays, D., Chen, J. & Shang, C. (2022). E-liquid Concept Favors: Evidence from Online Vape Shops in the US.

Ma, S., Shang, C., Cheng, K., Lee, H. M., He, Y., Tabuchi, T., Katanoda, K., Yoshimi, I., Gravely, S., Xu, S., Quah, A. C. K. & Fong, G. T. (2022). Rise in cigarette and heated tobacco product (HTP) taxes, and tobacco consumption in Japan: Findings from the 2018-2021 ITC Japan Surveys.

RESEARCH EXPERIENCE & VISITING POSITION

Visiting Student, National Bureau of Economic Research (NBER) New York Office, 2018 – 2020

- Developed doctoral dissertation that examined the effects of local paid sick leave laws in the U.S. on private sector workers' decisions to change employer/job, and on women's decisions to give birth.
- Learned from and interacted with health economists, labor economists, and public health researchers at the NBER New York Office.

Research Coordinator, New York University Perlmutter Cancer Center, Sep. 2017 - Dec. 2018

- Supervised and managed *Bellevue Hospital Breast Cancer Database* and coordinated ongoing clinical research programs in the breast clinic of Bellevue Hospital.
- Coordinated with clinic staff and physicians of patients' status in treatment including clinical trials and assisted with preparation of progress reports to funding agencies.
- Facilitated analysis and reporting of variables for the preparation of grant applications and manuscripts for publication, and coordinated regulatory processes and paperwork associated with open protocols.

RESEARCH GRANTS & SCHOLARSHIP

Doctoral Student Research Grant, \$890 from CUNY Graduate Center, 2019 - 2020

Doctoral Student Research Grant, \$1,100 from CUNY Graduate Center, 2017 - 2018

Graduate Students Summer Scholarship, \$1,800 from Miami University, Summer 2014

PROFESSIONAL DEVELOPMENT GRANTS

The James Annual Scientific Meeting Travel Award, \$1,500 from The Ohio State University, Oct. 2021

European Job Market Travel Grant, €200 from European Economic Association, Dec. 2019

FELLOWSHIPS & ASSISTANTSHIP

Pelotonia Postdoctoral Fellowship, annual salary plus benefits (in total \$72,705 a year) from The Ohio State University, 2022 - 2024

Sallie Mae Fund Student Fellowship, \$7,000 from CUNY Graduate Center, 2019 - 2020

Graduate Center Fellowship, \$26,000 annual stipend plus tuition waiver from CUNY Graduate Center, 2015 - 2019

Graduate Center Tuition Fellowship, tuition waiver from CUNY Graduate Center, 2014 - 2015

Graduate Assistantship, \$2,507.42 stipend plus 47% tuition waiver from Miami University, 2013 - 2014

HONORS & AWARDS

Population Sciences Poster Winner (First Place) in The James – OSU Comprehensive Cancer Center Annual Scientific Meeting, 2021

American Society of Health Economists Diversity Scholarship, 2021

NBER Summer Institute Health Economics Workshop, Invited Attendee, Jul. 2019, Jul. 2020, Jul. 2021, Jul. 2022

NBER Health Economics Program Meeting, Invited Attendee, Apr. 2019, Dec. 2020, May 2021, Dec. 2021

SEMINAR & CONFERENCE PRESENTATIONS

- **Ma, S.**, Ling, M., Chen, J., & Shang, C. (2023, March 1-4). *Applying Natural Language Processing (NLP) Tools to Assess LGBTQ Research Gaps in Tobacco Control Literature*. Society for Research on Nicotine and Tobacco 29th Annual Meeting, San Antonio, TX, United States.
- **Ma, S.**, Shang, C., Pechacek, T. & Weaver S. (2023, March 1-4). *The Impacts of Product Characteristics and Regulatory Environment on Smokers' Preferences for Tobacco and Alcohol Co-Use: Evidence from A Volumetric Choice Experiment*. Society for Research on Nicotine and Tobacco 29th Annual Meeting, San Antonio, TX, United States. (Poster presentation)
- **Ma, S.**, Jiang, S., Wagener, T., Mays, D., Chen, J. & Shang, C. (2022, November 6-9). *How E-liquid Products Are Priced Based on Product Characteristics: Evidence from Online Vape Shops*. American Public Health Association Annual Meeting, Boston, MA, United States.
- Ma, S., Shang, C., Pechacek, T. & Weaver S. (2022, October 14). The Impacts of Product Characteristics and Regulatory Environment on Smokers' Preferences for Tobacco and Alcohol Co-Use: Evidence from A Volumetric Choice Experiment. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)
- Ma, S., Ling, M., Chen, J. & Shang, C. (2022, October 14). *Applying Natural Language Processing (NLP) Tools to Assess LGBTQ Research Gaps in Tobacco Control Literature*. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)

- **Ma, S.**, Mirza, M., Schuster, A., Bridges, J. & Shang, C. (2022, October 14). A Systematic Review of The Effects of Public Policies on Tobacco, Alcohol, And Marijuana Use Among LGBTQIA+ Populations. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)
- **Ma, S.**, Jiang, S., Ling, M., Lu, B., Chen, J. & Shang, C. (2022, August 10–12). *Excise Taxes and Pricing Activities of E-liquid Products Sold in Online Vape Shops*. International Institute of Public Finance 78th Annual Congress, Linz, Austria. (Co-author of presenting author)
- **Ma, S.** (2022, June 17). *How to scrape online information: with application to online vape shops*. Tobacco Online Policy Seminar (TOPS), virtual. (Workshop format)
- **Ma, S.** (2022, May 25). *How E-liquid Products Are Priced Based on Product Characteristics: Evidence from Online Vape Shops.* The Ohio State University Center for Tobacco Research (CTR) Trainee Seminar, virtual.
- Ma, S., Jiang, S., Ling, M., Wagener, T., Chen, J. & Shang, C. (2022, March 15-18). <u>How Vaping Products Are Priced Based on Product Characteristics: Evidence from Online Vape Shops</u>. Society for Research on Nicotine and Tobacco 28th Annual Meeting, Baltimore, MD, United States. (Poster presentation)
- Ma, S., Jiang, S., Ling, M., Chen, J. & Shang, C. (2022, March 15-18). <u>Price Promotions of Vaping Products in Online Stores</u>. Society for Research on Nicotine and Tobacco 28th Annual Meeting, Baltimore, MD, United States. (Poster presentation)
- Ling, M., Ma, S., Jiang, S., Chen, J. & Shang, C. (2022, March 15-18). <u>DeepTobaccoWorks: An Application of Natural Language Processing (NLP) to Assess Disparities in Tobacco Research</u>. Society for Research on Nicotine and Tobacco 28th Annual Meeting, Baltimore, MD, United States. (Poster presentation)
- **Ma, S.**, Jiang, S., Hernandez, G., Ling, M., Chen, J. & Shang, C. (2022, March 15-18). *E-liquid Web Images from Online Vaping Stores: An Analysis of Warnings, Colors and Flavors on Product Packages*. Society for Research on Nicotine and Tobacco 28th Annual Meeting, Baltimore, MD, United States. (Poster presentation)
- **Ma, S.**, Jiang, S., Ling, M., Lu, B., Chen, J. & Shang, C. (2022, March 15-18). <u>Vapor Taxes and Pricing Activities of Online Vaping Stores</u>. Society for Research on Nicotine and Tobacco 28th Annual Meeting, Baltimore, MD, United States. (Poster presentation)
- **Ma, S.** (2022, March 4). Expanding E-Liquid Flavor Wheel: Classification of Emerging E-Liquid Flavors in Online Vape Shops. The 36th Edward F. Hayes Research Forum at The Ohio State University, Columbus, OH, United States.
- Ma, S., Jiang, S., Ling, M., Chen, J. & Shang, C. (2022, January 28). <u>E-cigarette sales prices, price promotion activities, and product attributes: analyses of web data extracted from online vape shops</u>. Patient Centered Outcomes Research (PCOR) Seminar at The Ohio State University College of Medicine, virtual.
- **Ma, S.**, Jiang, S., Ling, M., Wagener, T., Chen, J. & Shang, C. (2021, October 18-20). *How Vaping Products Are Priced Based on Product Characteristics: Evidence from Online Vape Shops.* The fifth National Institutes of Health (NIH) Tobacco Regulatory Science (TRS) Meeting, virtual. (Poster presentation)
- Ma, S., Jiang, S., Hernandez, G., Ling, M., Chen, J. & Shang, C. (2021, October 11-14). *E-liquid Web Images from Online Vaping Stores: An Analysis of Warnings, Colors and Flavors on Product Packages*. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)

- **Ma, S.**, Jiang, S., Ling, M., Lu, B., Chen, J. & Shang, C. (2021, October 11-14). <u>Vapor Taxes and Pricing Activities of Online Vaping Stores</u>. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)
- Ma, S., Jiang, S., Ling, M., Wagener, T., Chen, J. & Shang, C. (2021, October 11-14). <u>How Vaping Products Are Priced Based on Product Characteristics: Evidence from Online Vape Shops</u>. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)
- **Ma, S.**, Jiang, S., Ling, M., Chen, J. & Shang, C. (2021, October 11-14). <u>Price Promotions of Vaping Products in Online Stores</u>. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)
- * Population Sciences Poster Winner (First Place) at The James OSU Comprehensive Cancer Center Annual Scientific Meeting
- Ma, S., Ling, M., Jiang, S., Chen, J. & Shang, C. (2021, October 11-14). <u>DeepTobaccoWorks: An Application of Natural Language Processing (NLP) to Assess Disparities in Tobacco Research</u>. Annual Scientific Meeting at The James Ohio State University Comprehensive Cancer Center, Columbus, OH, United States. (Poster presentation)
- Shang, C., **Ma**, S., Jiang, S., & Chen, J. (2021, July 12-15). <u>E-Cigarettes Sales Prices and Price Promotion in Vape Shops</u>. International Health Economics Association Biennial Congress, virtual. (Co-author of presenting author)
- Ma, S., Jiang, S., Ling, M., Shang, C. & Chen, J. (2021, May 6). *Policies Regulating Electronic Cigarette Use and Pricing Activities of Vape Shops in the US*. Department of Internal Medicine Annual Scientific Symposium at The Ohio State University College of Medicine, virtual. (Poster presentation)
- **Ma, S.**, Shang, C., Chaloupka, F. J., Lindblom, E. N. & Warner, K. E. (2021, May 6). *Tax Burden of Electronic Nicotine Delivery Systems (ENDS) Under Different Tax Structures*. Department of Internal Medicine Annual Scientific Symposium at The Ohio State University College of Medicine, virtual. (Poster presentation)
- Ling, M., Ma, S., Jiang, S., Chen, J. & Shang, C. (2021, February 24-27). *Real-time Review of Tobacco Research Using Machine-Learning Techniques*. Society for Research on Nicotine and Tobacco 27th Annual Meeting, virtual. (Poster presentation)
- Shang, C., **Ma, S.**, Chaloupka, F. J., Lindblom, E. N. & Warner, K. E. (2021, February 24-27). *The burden of ENDS excise taxes by product types*. Society for Research on Nicotine and Tobacco 27th Annual Meeting, virtual. (Poster presentation)
- Shang, C., **Ma**, **S**., Chaloupka, F. J., Lindblom, E. N. & Warner, K. E. (2021, February 24-27). *Tax structures of substances and implications in tobacco control*. Society for Research on Nicotine and Tobacco 27th Annual Meeting, virtual. (Poster presentation)
- **Ma, S.** (2020, November 21-23). *Paid Sick Time Mandates and Worker Mobility in the U.S.* Southern Economic Association 90th Annual Meeting, virtual.
- **Ma, S.** (2020, August 24-28). *Paid Sick Time Mandates and Worker Mobility in the U.S.* European Economic Association 35th Annual Congress, virtual.

- **Ma, S.** (2020, July 23-24). *The Effect of Access to Paid Sick Time on Fertility*. Association for Public Policy Analysis and Management International Conference, virtual.
- **Ma, S.** (2020, June 26-30). <u>Paid Sick Time Mandates and Worker Mobility in the U.S.</u> Western Economic Association International 95th Annual Conference, virtual.
- **Ma, S.** (2020, March 13). <u>Paid Sick Time Mandates and Worker Mobility in the U.S.</u> Health, History, Demography and Development Seminar at University of Michigan, virtual. (Poster presentation)
- **Ma, S.** (2019, November 8). *Paid Sick Time Mandates and Worker Mobility in the U.S.* Economics Seminar at Miami University, Oxford, OH, United States.
- **Ma, S.** (2019, October 24). <u>Paid Sick Time Mandates and Worker Mobility in the U.S.</u> Applied Economics Seminar at CUNY Graduate Center, New York, NY, United States.
- **Ma, S.**, Davis, G. & Li, J. (2018, June 26-30). <u>The Effect of Income Inequality on Household Consumption:</u> <u>Evidence from China Household Finance Survey Data.</u> Western Economic Association International 93rd Annual Conference, Vancouver, B. C., Canada.
- **Ma, S.**, Davis, G. & Li, J. (2018, April 5-7). <u>The Effect of Income Inequality on Household Consumption:</u> <u>Evidence from China Household Finance Survey Data.</u> Chinese Economists Society North America Conference, Athens, GA, United States.
- Ma, S., Davis, G. & Li, J. (2018, March 1-4). *The Effect of Income Inequality on Household Consumption: Evidence from China Household Finance Survey Data*. Eastern Economic Association 44th Annual Conference, Boston, MA, United States.
- Ma, S. (2017, March 28). The Impact of Urban Resident Basic Medical Insurance on the Aging Population in China. Brownbag Seminar at CUNY Graduate Center, New York, NY, United States.

TEACHING EXPERIENCE

Adjunct Lecturer, CUNY Queens College, Queens, NY, United States (SU20)

- Taught one class of *Price Theory* to 15 undergraduate students, both majors and non-majors.
- Developed syllabus, designed problem sets and exams, and held office hours each week.
- Demonstrated how to apply microeconomic models to consumers' and firms' decision-making problems at an advanced level.
- Helped students learn necessary mathematical methods used in those economics analysis and provided practical tools to evaluate the impacts of some public policies.

Adjunct Lecturer, CUNY Hunter College, New York, NY, United States (SP16, AU19, SP20)

- Taught one class of *Principles of Microeconomics* in two semesters (AU19, SP20), to an average of 90 diverse undergraduate students, both majors and non-majors.
- Taught a class of *Intermediate Microeconomics* (SP16) to 32 undergraduate students, mostly of Economics major.
- Developed syllabi and lesson plans, designed exams, and held office hours.
- Presented and illustrated models and other tools to help students learn the behaviors of individual consumers, households and firms in the economy.

- On weekly basis, posted discussions on forums to reinforce learning beyond the classroom.
- Provided accommodations for students with disabilities to promote an accessible and inclusive education environment.
- Created class activities in response to different students' learning styles.
- Used multimedia, PowerPoint and cases to stimulate learning process.

Quantitative Reasoning Fellow, CUNY Hunter College, New York, NY, United States (AU18, SP19)

- Designed <u>Math in Economics tutorials</u> that covered eight topics from <u>reading graphs</u> in introductory Economics courses to <u>calculating derivatives</u> and <u>Stata basics</u> in more advanced Economics classes.
- Clarified both basic and complex Economic concepts and methods, to increase students' understanding of class content.
- Reviewed mathematical and statistical methods for students who take Economics courses that require those knowledge as prerequisites.
- The tutorials were used in both *Dolciani Mathematics Learning Center* and *Economics Tutoring Center* of Hunter College.

Graduate Teaching Fellow (Instructor of Record), CUNY Queens College, Queens, NY, United States (AU15, SP16, AU16, SP17, AU17, SP18)

- Taught *Introduction to Microeconomics* (SP18) to 29 undergraduate students, both majors and non-majors.
- Taught one class of *Introduction to Econometrics* in three semesters (SP16, AU16, SP17), to an average of 16 undergraduate students, mostly of Economics major.
- Taught one class of *Introduction to Macroeconomics* in two semesters (AU15, AU17), to an average of 46 undergraduate students, both majors and non-majors.
- Developed syllabi, designed problem sets and exams, and held lab sessions and office hours.
- Introduced students to basic theory and empirical approaches in Economics, and prepared them for higher levels of Economics studies.
- Created empirical projects, exercises, and opportunities of oral presentation, for students to demonstrate teamwork and problem-solving skills.
- Assessed students' progress through both formative and summative evaluations.

Teaching Assistant, CUNY Baruch College, New York, NY, United States (SP15, AU15)

- Facilitated recitations sessions for *Principles of Microeconomics* and *Principles of Macroeconomics* courses.
- Increased students' competency with concepts and analyses from large lectures, through in-class exercises and practice problem sets.
- Utilized a multimedia approach to engage students' interest in economics models and key variables from those models.

Economics Tutor, CUNY Hunter College, New York, NY, United States (AU14, SP15)

• Tutored in a list of undergraduate level courses, including *Microeconomics*, *Macroeconomics*, *Money and Banking*, *Economic Statistics*, *Econometrics*, *International Trade*, *International Finance*, *Corporate Finance*, and *Security and Investment Analysis*.

- Provided one-on-one instruction to students at the Economics Tutoring Center, to improve their skills in solving economics problems.
- Clarified economics concepts and theories through graphic presentation of models and other tools, to increase students' understanding of class content.
- Reviewed basic topics in probability and statistics for students to build solid foundation for further study of econometrics.
- Helped students learn techniques in empirical research and familiarized them with the application of those techniques to a variety of economic datasets.

Teaching Assistant, Miami University, Oxford, OH, United States (AU13, SP14)

 Assisted professors teaching Economics courses (Game Theory with Economic Applications and Examining Economic Data and Models in SP14, and Principles of Microeconomics in AU13, SP14 semesters) with grading assignments, holding exam review sessions, and proctoring exams.

PROFESSIONAL AFFILIATIONS

American Public Health Association (APHA), active member (2022 - present)

Women in Medicine and Science (WIMS) at OSU, active member (2022 - present)

OSU Center for Clinical and Translational Science (CCTS), active member (2022 - present)

International Society for the Study of Drug Policy, active member (2022 - present)

OSU Translational Data Analytics Institute (TDAI), active member (2021 - present)

Society for Research on Nicotine and Tobacco (SRNT), active member (2020 - present)

American Society of Health Economists, active member (2020 - present)

American Economic Association, active member (2020 - present)

PROFESSIONAL LEADERSHIP/SERVICE

Referee for peer-reviewed journals:

Tobacco Control (\times 2), Addiction (\times 2), Preventive Medicine (\times 3), BMJ Open (\times 4), International Journal of Environmental Research and Public Health (\times 1), Alcohol and Alcoholism (\times 1), Drug and Alcohol Dependence Reports (\times 4)

Abstract reviewer for academic conferences:

American Public Health Association 2022 Annual Meeting

American Society of Health Economists 11th Annual Conference

AcademyHealth 2022 National Health Policy Conference, "Science and Technology Policy" theme AcademyHealth 2022 Annual Research Meeting, "Public and Population Health" theme

Discussant for conference sessions:

American Society of Health Economists 10th Annual Conference, Jun. 2021 (virtual)

Western Economic Association International 95th Annual Conference, Jun. 2020 (virtual)

Western Economic Association International 93rd Annual Conference, Jun. 2018

Committee service:

Communications Subcommittee Member, SRNT 2022-2023 Trainee Network Advisory Committee Member, SRNT Policy Research Network Advisory Committee

Judge for student-based scientific-research event:

Ohio Academy of Science 2021 State Science Day (interdisciplinary research award)

UNIVERSITY SERVICE

Reviewer for OSU Postdoctoral Association (PDA)'s professional development awards, Jan. 2022

Member of Organizing Committee for research poster session at the annual OSU TDAI Fall Forum, Nov. 2021

MENTORING

Mentored two graduate students during PhD studies at CUNY Graduate Center (2019 - 2020), and three undergraduate students and one graduate student during postdoc at OSU (2021 - 2022)

Participated with mentee in a professional workshop and received mentorship training (2021 - 2022)

Advised undergraduate students interested in Economics about academic courses, graduate school applications and potential careers in the field (2016 - 2019)

ADDITIONAL SKILLS

Statistical packages:

Stata, R, Python, MATLAB, Mathematica, Maple, EViews, SPSS

Languages:

Mandarin Chinese (native), English (professional working proficiency)