

Can Liu, MD PhD

I am a transdisciplinary epidemiologist. I focus on maternal and child health of vulnerable populations, with a special emphasis on life-course and inter-generational transmission of health.

PERSONAL DETAILS

Address Sveavägen 160, floor 3 and 5, SE-106 91 Stockholm, Sweden
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PROFESSIONAL EXPERIENCE

Researcher 02/2021–Present
Department of Public Health Sciences, Stockholm University

Postdoc 11/2019–01/2021
Neonatal and Developmental Medicine, Department of Pediatrics, Stanford School of Medicine

Postdoc 10/2017–10/2019
Unit of Clinical Epidemiology, Department of Medicine, Karolinska Institutet
Centre for Health Equity Studies, Department of Public Health, Stockholm University

EDUCATION

Ph.D. Medicine 6/2013–9/2017
Karolinska Institutet
Main Supervisor: Prof. Anders Hjern
Co-supervisors: Prof. Sven Cnattingius and Prof. Viveca Östberg
Thesis : [Psychosocial factors and preterm birth: national register-based studies](#)
Dissertation date: 2017.September.1

M.Sc. Population Health 9/2010–6/2012
Centre for Health Equity Studies, Karolinska Institutet/Stockholm University
Thesis: From family socioeconomic status to elementary school performance: the role of poor birth condition

B.Med. Medicine 9/2003–6/2008
Shanghai Medical College, Fudan University, China
Thesis: Ethyl pyruvate protects against hypoxic-ischemic brain injury in neonatal Sprague Dawley rat model

PUBLICATION IN PEER-REVIEWED JOURNALS

1. Bane S, Carmichael S, Snowden J, Liu C, Lyndon A, Wall-Wieler E. Does Severe Maternal Morbidity impact the probability of subsequent birth? A population-based study of women in California from 1997-2012. *Ann Epidemiol*. In press.

2. **Liu C**, Butwick AJ, Sand A, Wikström AK, Snowden JM, Stephansson O. The association between postpartum hemorrhage and postpartum depression: A Swedish national register-based study. *Plos One*. 2021 Aug 11;16(8):e0255938.
3. DiTosto JD, **Liu C**, Wall-Wieler E, Gibbs RS, Girsen AI, El-Sayed YY, Butwick AJ, Carmichael SL. Risk factors for postpartum readmission among women after having a stillbirth. *Am J Obstet Gynecol MFM*. 2021 Jul;3(4):100345.
4. **Liu C**, Snowden JM, Lyell DJ, Wall-Wieler E, Abrams B, Kan P, Stephansson O, Lyndon A, Carmichael SL. Interpregnancy interval and subsequent severe maternal morbidity: A population-based study from California over 16 years. *American Journal of Epidemiology*. 2021 Jun 1;190(6):1034-1046.
5. Butwick AJ, **Liu C**, Guo N, Main E, Bentley J, Mayo J, Shaw G, Stephansson O. Association of Gestational Age with Postpartum Hemorrhage: An International Cohort Study. *Anesthesiology*. 2021 Jun 1;134(6):874-886.
6. Lindblad Wollmann C, Hart K, **Liu C**, Ahlberg M, Caughey A, Stephansson O, Snowden J. Predicting vaginal birth after cesarean using machine learning models and a population-based cohort in Sweden. *Acta Obstet Gynecol Scand*. 2021 Mar;100(3):513-520.
7. Juárez S, Urquia M, Mussino E, **Liu C**, Qiao Y, Hjern A. Healthy migrant effect or artifact? The impact of the method of estimation of gestational age on birth outcome disparities between migrants and native Swedes. *Plos One*. 2021 Feb 22;16(2):e0247138.
8. **Liu C**, Wall-Wieler E, Urquia M, Carmichael SL, Stephansson O. Severe maternal morbidity among migrants with insecure residency status in Sweden 2000-2014. *Journal of Migration and Health*. 1.100006
9. **Liu C**, Långström N, Ekéus C, Frisell T, Cnattingius S, Hjern A. Paternal violent criminality and preterm birth: a Swedish national cohort study. *BMC Pregnancy Childbirth*. 2020.20(1):307
10. Wall-Wieler E, Robakis TK, Cesta CE, Masarwa R, Lyell DJ, **Liu C**, Platt RW, Carmichael SL. Antidepressant Use around Conception, Prepregnancy Depression, and Risk of Ectopic Pregnancy. *Can J Psychiatry*. 65(12):845-853
11. Harron K, Verfuerden M, Ibiebele I, **Liu C**, Kopp A, Guttman A, Ford J, van der Meulen J, Hjern A, Gilbert R. Preterm birth, unplanned hospital contact and mortality in infants born to teenage mothers in five countries. *Paediatr Perinat Epidemiol*. 2020. 34(6):645-654.
12. Lindblad Wollmann C, **Liu C**, Saltvedt S, Elvander C, Ahlberg M, Stephansson O. Risk of negative birth experience in trial of labor after cesarean delivery: A population-based cohort study. *PLoS One*. 2020.15(3):e0229304.
13. **Liu C**, Ahlberg M, Hjern A, Stephansson O. Perinatal health of refugee and asylum-seeking women in Sweden 2014-17: a register-based cohort study. *Eur J Public Health*. 2019.29(6):1048-1055
14. Schollin Ask L, **Liu C**, Gauffin K, Hjern A. The rotavirus vaccine effect on socioeconomic differentials of health care utilisation due to gastroenteritis in small children in Sweden. *Int J Environ Res Public Health*. 2019.16(7):1095
15. **Liu C**, Vinnerljung B, Östberg V, Gauffin K, Juárez S, Cnattingius S, Hjern A. Out-of-Home Care and Subsequent Preterm Delivery: An Intergenerational Cohort Study. *Pediatrics*. 2018.142(2)

16. Wall-Wieler E, Carmichael SL, Urquia M, **Liu C**, Hjern A. Severe maternal morbidity and postpartum mental health-related outcomes in Sweden: a population-based matched-cohort study. *Arch Womens Ment Health*. 2018.22(4):519-526
17. Wall-Wieler E, Vinnerljung B, **Liu C**, Roos LL, Hjern A. Avoidable mortality among parents whose children were placed in care in Sweden: a population-based study. *Journal of Epidemiology and Community Health*. 2018.72(12):1091-1098
18. Wall-Wieler E, Almquist Y, **Liu C**, Vinnerljung B, Hjern A. Intergenerational transmission of out-of-home care in Sweden: A population-based cohort study. *Child Abuse Negl*. 2018.83:42-51
19. Wall-Wieler E, Bolton J, **Liu C**, Wilcox H, Roos L, Hjern A. Intergenerational Involvement in Out-of-Home Care and Death by Suicide in Sweden: A Population-based Cohort Study. *Journal of Affective Disorders*. 2018.238:506-12
20. **Liu C**, Cnattingius S, Bergström M, Östberg V, Hjern A. Prenatal parental depression and preterm birth: a national cohort study. *BJOG: An International Journal of Obstetrics and Gynaecology*. 2016.123(12):1973-82 **In the top 5% of all research outputs scored by Altmetric**
21. Urquia ML, Qiao Y, Ray JG, **Liu C**, Hjern A. Birth Outcomes of Foreign-Born, Native-Born, and Mixed Couples in Sweden. *Paediatric and perinatal epidemiology*. 2015.29(2):123-30
22. **Liu C**, Urquia M, Cnattingius S, Hjern A. Migration and preterm birth in war refugees: a Swedish cohort study. *Eur J Epidemiol*. 2014.29(2):141-3
23. Shen H, Hu X, **Liu C**, Wang S, Zhang W, Gao H, et al. Ethyl pyruvate protects against hypoxic-ischemic brain injury via anti-cell death and anti-inflammatory mechanisms. *Neurobiology of disease*. 2010.37(3):711-22

BOOK CHAPTER

- **Liu C**, Signore AP, Cao G, Chen J. Apoptosis-Inducing Factor Translocation to Nuclei After Transient Global Ischemia. *Acute Neuronal Injury: Springer*; 2010. p. 131-44

SUBMITTED MANUSCRIPTS

1. **Liu C**, Grotta A, Hiyoshi A, Berg L, Rostila M. Parental death during childhood and school outcomes: a register-based sibling comparison study.
2. **Liu C**, Main E, Carmichael S. Relationship between severe maternal morbidity and maternal death: a population-based linked study in California.
3. **Liu C**, Snowden J, Rossin- Slater M, Torche F, Carmichael S. Impact of Medicaid Expansion on Interpregnancy Interval.

CONFERENCE PRESENTATIONS

- Liu C, Ahlberg M, Hjern A, Stephansson O. Perinatal health of refugee and asylum-seeking women in Sweden 2014-17: a register-based cohort study. (Oral) 32nd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research (SPER), Minneapolis
- Liu C, Sand A, Snowden J, Butwick A, Wikström AK, Stephansson O (2018) No Increased Risk of Postpartum Depression after Severe Postpartum Hemorrhage. (Poster) 31st Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research (SPER), Baltimore
- Liu C, Långström N, Ekéus C, Frisell T, Cnattingius S, Hjern A (2016) Paternal violent criminality and preterm birth: a Swedish national cohort study. (Oral) 9th European Public Health Conference, Vienna
- Liu C, Urquia M, Cnattingius S, Hjern A (2014) Migration and preterm birth in war refugees: a Swedish cohort study. (Oral) 5th European Conference on Migrant and Ethnic Minority Health, Granada

TEACHING

- Co-Supervision of master thesis of Julia Deegan DiTosto (2020) at Stanford University
- Co-Supervision of master thesis of Daniel Tuttle (2015) and Sha Di (2017) at Stockholm University
- Lecturing in biannual course **Methodology II** at Centre for Health Equity Studies (2017)
- Tutoring in **Methods in Practice** for master students at Centre for Health Equity Studies (2015-18)

TECHNICAL SKILLS

Data Management

- SAS (6 years)
- SQL (5 years)

Statistical analysis

- STATA (6 years)

Data visualization

- R (1 year)

LANGUAGE SKILLS

- Chinese (Native)
- English (Proficient)
- Swedish (Basic)

HONORS AND AWARDS

- Heinz Berendes Travel Award by The Society for Pediatric and Perinatal Epidemiologic Research (2019)
- Hirschs Travel fund for Surgeons awarded by Karolinska Institutet (2016)
- Travel fund for doctoral students awarded by Karolinska Institutet (2015)