Can Liu, MD PhD

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

PERSONAL DETAILS

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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

1. Socioeconomic and psychosocial outcomes of parents with children in out-of-home care: A scoping review. Children and Youth Services Review. 2024 Aug. doi: 10.1016/j.childyouth.2024.107854.
2. Grandparenthood and Risk of Hospitalization: Applying Principles of a Target Trial on a National Birth Cohort from Sweden. OSF Registries. 2024 June. doi: 10.17605/OSF.IO/3KR4X

3. Jackisch J, **Liu C**. Taking a life course approach to healthy ageing and multimorbidity: defining risk factors is not the end, we can do more. Lancet Healthy Longev. 2024 Jan;5(1):e8-e9. doi: 10.1016/S2666-7568(23)00242-8.

4. Axelsson Fisk S, Petersen JA, Rostila M, **Liu C**, Juárez SP. Social inequalities in the risk of giving birth to a small for gestational age child in Sweden 2010–16: a cross-sectional study adopting an intersectional approach. Eur J Public Health. 2024 Feb 5;34(1):22-28. doi: 10.1093/eurpub/ckad184.

5. **Liu C**, Grotta A, Hiyoshi A, Berg L, Wall-Wieler E, Martikainen P, Kawachi I, Rostila M. Parental death and initiation of antidepressant treatment in surviving children and youth: a national register-based matched cohort study. eClinicalMedicine. 2023 June 1. doi: 10.1016/j.eclinm.2023.102032.

6. Li BJ, Almquist YB, **Liu C**, Berg L. Disentangling the multigenerational transmissions of socioeconomic disadvantages and mental health problems by gender and across lineages: Findings from the Stockholm Birth Cohort Multigenerational Study. SSM-Population Health. 2023 June 1. doi: 10.1016/j.ssmph.2023.101357.

7. Grotta A, **Liu C**, Hiyoshi A, Berg L, Kawachi I, Saarela J, Rostila M. Suicide around anniversaries of a parent's death: a case-crossover study using Swedish National Registers. JAMA network open. 2023 Apr 3;6(4):e236951. doi:10.1001/jamanetworkopen.2023.6951

8. Brismar Wendel S, **Liu C**, Stephansson O. The association between episiotomy or OASIS at vacuum extraction in nulliparous women and subsequent prelabor cesarean delivery: A nationwide observational study. Acta Obstet Gynecol Scand. 2023 Jan 24. doi: 10.1111/aogs.14513.

9. **Liu C**, Grotta A, Hiyoshi A, Berg L, Rostila M. School outcomes among children following death of a parent. JAMA Network Open. 2022 Apr 1;5(4):e223842. doi: 10.1001/jamanetworkopen.2022.3842.

10. **Liu C**, Snowden J, Rossin- Slater M, Torche F, DiTosto DJ, Carmichael S. Impact of Medicaid Expansion on Interpregnancy Interval. Women's Health Issues. doi: 10.1016/j.whi.2021.12.004.

11. Carmichael S, Abrams A, El Ayadi A, Lee HC, **Liu C**, Lyell DJ, Lyndon A, Main E, Mujahid M, Tian L, Snowden J. Ways Forward in Preventing Severe Maternal Morbidity and Maternal Health Inequities: Conceptual Frameworks, Definitions, and Data, from a Population Health Perspective. Womens Health Issues. Women's Health Issues. doi: 10.1016/j.whi.2021.11.006.

12. Bane S, Carmichael SL, 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. 2021 Dec;64:8-14.

13. **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.

14. 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.

15. **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.

16. 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.

17. 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.

18. 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.

19. **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

20. **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

21. 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

22. Harron K, Verfuerden M, Ibiebele I, **Liu C**, Kopp A, Guttmann 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.

23. 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.

24. **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

25. 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

26. **Liu C**, Vinnerljung B, Östberg V, Gauffin K, Juarez S, Cnattingius S, Hjern A. Out-of-Home Care and Subsequent Preterm Delivery: An Intergenerational Cohort Study. Pediatrics. 2018.142(2)

27. 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

28. 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

29. Wall-Wieler E, Almquist YB, **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

30. 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

31. **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**

32. 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

33. **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

34. 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

CONFERENCE PRESENTATIONS

- **Liu C**, Jackisch J (2024) European Society of Health and Medical Sociology (ESHMS), Antwerp
- **Liu C**, Hiyoshi A, Namatovu F, Rostila M, Grotta A (2023) Birth outcomes of parents with disability in Sweden, a national register-based study. The 16th Nordic Network on Disability Research Conference, Reykjavik
- **Liu C**, Ahlberg M, Hjern A, Stephansson O (2019) 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

GRANTED RESEARCH PROJECTS

- **Overlooked Children in Need (ORCHID): A Study on the Development and Well-Being of Children of Parents with Disabilities** *Funding Agency: Swedish Research Council for Health, Working Life and Welfare (FORTE)* Competition: Project Grant 2023 Role: Principal Investigator (PI) Grant Amount: 4,281,000 SEK Duration: 2024-2026
- **Mistreatment and Discrimination in Maternity Care for Women of Minority Status (MISMATCH)** *Funding Agency: Swedish Research Council* Competition: Project Grant focus on Racism and discrimination 2023 Role: Principal Investigator (PI) Grant Amount: 4,934,000 SEK Duration: 2024-2026

HONORS AND AWARDS

- Heinz Berendes Travel Award by The Society for Pediatric and Perinatal Epidemiologic Research (2019)