



KaBris 2026 Methods Workshop

Wednesday, 9 September 2026 | 13:00–16:30

Inghessalen, 2nd floor, Widerströmska House, Tomtebodavägen 18A

Karolinska Institute, Solna Campus

Time	Session	Speaker
13:00–13:05	Welcome and introduction	Renee Gardner
13:05–13:45	Theme 1: Family-based genetic epidemiology Within-family genetic methods	Isabella Badini & Neil Davies
13:45–13:50	Leg stretch	
13:50–14:20	Theme 2: Natural experiments and methods from health economics Using individual-level panel data to estimate causes of child mental health onset	Gawain Heckley
14:20–14:40	Coffee/tea break	
14:40–15:10	Theme 2 continued: Difference-in-differences and natural experiments: using policy changes to strengthen causal inference	Hanna Mühlrad
15:10–15:15	Leg stretch	
15:15–16:00	Theme 3: Target-trial emulation An introduction to the principles and practice of target-trial emulation	Paul Madley-Dowd
16.00 – 16.20	Methods spotlight: Propagation of Uncertainty for Group-Based Trajectory Models	Anja Holowell
16:20 – 16:30	General discussion and closing	

Recommended (but in no way required) reading:

If you are particularly interested in any of the themes presented during the workshop, and wish to read up in advance or wish to continue learning afterwards, here are some key references, as suggested by our speakers:

Theme 1: Family-based genetic epidemiology

Corfield EC, Shadrin AA, et al. *Family genetic designs in MoBa provide insights into health and functioning*. Nature. 2026. <https://doi.org/10.1038/s41586-026-10926-5>

Suggested as the key reference for this session; a recent application of family genetic designs using the Norwegian Mother, Father and Child Cohort Study (MoBa).

Davies NM, Hemani G, et al. *The importance of family-based sampling for biobanks*. Nature. 2024;634:795–803. <https://doi.org/10.1038/s41586-024-07721-5>

Perspective on the value of family-based sampling and the opportunities it provides for genetic research.

Theme 2A: Individual-level panel data and human capital development

Relevant references for estimating “human capital development” models.

- Black N, Jayawardana D, Heckley G.** *Children’s time allocation and the socioeconomic gap in human capital.* European Economic Review. 2024;168:104821. <https://doi.org/10.1016/j.euroecorev.2024.104821>
- Caetano C.** *A test of exogeneity without instrumental variables in models with bunching.* Econometrica. 2015;83(4):1581–1600. <https://doi.org/10.3982/ECTA11231>
- Fiorini M, Keane MP.** *How the allocation of children’s time affects cognitive and noncognitive development.* Journal of Labor Economics. 2014;32(4):787–836. <https://doi.org/10.1086/677232>
- Todd PE, Wolpin KI.** *On the specification and estimation of the production function for cognitive achievement.* Economic Journal. 2003;113(485):F3–F33. <https://doi.org/10.1111/1468-0297.00097>
- Todd PE, Wolpin KI.** *The production of cognitive achievement in children: home, school, and racial test score gaps.* Journal of Human Capital. 2007;1(1):91–136. <https://doi.org/10.1086/526401>

Theme 2B: Difference-in-differences and natural experiments

- Bilinski A, Feng S, Hatfield LA.** *Estimating intervention effects with difference-in-differences.* JAMA. 2026;336(6):508–509. <https://doi.org/10.1001/jama.2026.12551>
A concise introduction to difference-in-differences, particularly useful as background for the workshop.
- Angrist JD, Pischke J-S.** *Mostly Harmless Econometrics: An Empiricist’s Companion.* Princeton University Press. 2009. <https://doi.org/10.1515/9781400829828>
Hanna’s description: “The Econ bible :)”. Chapter 5 could be particularly relevant, as it covers fixed effects, difference-in-differences and panel data.

Theme 3: Target-trial emulation

- Hernán MA, Robins JM.** *Using big data to emulate a target trial when a randomized trial is not available.* American Journal of Epidemiology. 2016;183(8):758–764. <https://doi.org/10.1093/aje/kwv254>
The first key paper on target trials, although the concept itself has a longer history.
- Cashin AG, Hansford HJ, et al.** *Transparent reporting of observational studies emulating a target trial—the TARGET statement.* JAMA. 2025;334(12):1084–1093. <https://doi.org/10.1001/jama.2025.13350>
The TARGET reporting guideline/checklist; useful for identifying the key components that need to be specified in a target-trial emulation.
- Fu EL, Harhay MO, et al.** *Starting right: aligning eligibility and treatment assignment at time zero when emulating a target trial.* BMJ. 2026;392:e084909. <https://doi.org/10.1136/bmj-2025-084909>
A guide to aligning the start of eligibility, treatment assignment and follow-up in target-trial emulation.
- Hernán MA.** *Does water kill? A call for less casual causal inferences.* Annals of Epidemiology. 2016;26(10):674–680. <https://doi.org/10.1016/j.annepidem.2016.08.016>
A guide to thinking carefully about how treatment strategies or interventions are defined.
- Hernán MA, Sterne JAC, et al.** *A structural description of biases that generate immortal time.* Epidemiology. 2025;36(1):107–114. <https://doi.org/10.1097/EDE.0000000000001808>
A structural approach to understanding immortal time; arguably the key bias that target-trial emulation is designed to address.