

**Mini-Workshop  
Economics of Human Development  
School of Economics & Life Course Centre  
The University of Sydney**

The School of Economics and the Life Course Centre cordially invites you to a mini-workshop in applied microeconomics/econometrics with Dr Miriam Gensowski (UCopenhagen), Dr Rémi Piatek (UCopenhagen), and Dr Thomas Schober (ULinz). The topic of the workshop centers on *The Economics of Human Development*.

The workshop will take place on **Friday 29 March 2019, 11.00-1.30PM, Room 650 Level 6 Social Sciences Building (A02)**. The workshop is open to the general public and is free of charge. Lunch will be served during the workshop. Please RSVP at [Janelle Kennington](mailto:Janelle.Kennington@sydney.edu.au) (Janelle.Kennington@sydney.edu.au).

**Thomas Schober**

Research Fellow  
Linz University



**Birth order, parental health investment and health in childhood**

Research has shown that birth order affects human capital outcomes. First-born children have higher cognitive and non-cognitive skills, educational attainment and earnings. Only little is known about the effects of birth order on health. This paper offers a comprehensive picture of the relationship between birth order, health at birth and in childhood and parental health investments. High-quality administrative data on children born in Austria between 1984 and 2015 allows us to exploit within-family variation accounting for confounding factors at the family level. We find a statistically significant and quantitatively important health disadvantage for first-born children at birth and in primary school. School health examination data show that first-born children are more likely suffering from allergies, hearing problems, dental issues, motor skills issues and obesity. Consequently, first-born children have a higher probability to consume medical drugs and to use medical services in the inpatient and outpatient sector. Finally, we find significant birth order differences in parental health investment in toddlers and preschoolers. Compared to their later-born siblings, first-born children are more likely to participate in preventive medical checkups, and are more likely to have received immunization against measles, mumps and rubella.

**Rémi Piatek**

Assistant Professor  
University of Copenhagen



***A multinomial probit model with latent factors, with an application to the study of inequality in educational attainment***

Many studies of human decision-making involve choices between numerous unordered options. We develop a parametrization of the multinomial probit model that facilitates this kind of analysis. Our approach yields greater insight into the underlying decision-making process, by decomposing the error terms of the utilities into a small set of latent factors. The latent factors are identified without a measurement system, and they can be meaningfully linked to an economic model. We provide sufficient conditions that make this structure identifiable and interpretable. For inference, we design a Markov chain Monte Carlo sampler based on marginal data augmentation. A simulation exercise shows the good numerical performance of our sampler and reveals the practical importance of alternative identification restrictions. Our approach can generally be applied to any setting where researchers can specify an a priori structure on a few drivers of unobserved heterogeneity. In this presentation, it will be applied to the study of the importance of skills and parental background in explaining educational attainment.

**Miriam Gensowski**

Assistant Professor  
University of Copenhagen



***Joint Choice of Education and Occupation: The Role of Parental Occupation***

We apply the multinomial probit model with latent factors to bring a fresh perspective to inequality in educational attainment, suggesting occupational sorting as an unexplored channel that may depress education outcomes in children from less advantaged families, in addition to established considerations such as school readiness and financing constraints. To study this channel, education and occupation choices are analyzed jointly, whereas existing research usually treats them as separate. A 5% representative sample of US high schoolers to determine the impact of multiple cognitive and non-cognitive skills on occupational choice, relative to parental background.