**JOB DESCRIPTION**

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Postdoctoral Research Associate</th>
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<tbody>
<tr>
<td>Department / Unit:</td>
<td>Economics</td>
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<tr>
<td>Job type</td>
<td>Research</td>
</tr>
<tr>
<td>Grade:</td>
<td>Grade 7 (spine 34)</td>
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<tr>
<td>Accountable to:</td>
<td>Prof. Dan Anderberg</td>
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<td>Accountable for:</td>
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**Purpose of the Post**

To post relates to recently awarded ESRC grant “Intimate Partner Violence and Children's Human Capital: The Development of Socio-Emotional and Cognitive Skills in Early Years” (ESRC grant reference ES/V016067/1).

The holder of the current post will join an international team, consisting of Prof. Dan Anderberg (PI, RHUL), Gloria Moroni (Co-I, Erasmus University), and Alex Vickery (British Academy postdoctoral fellow) to deliver a research project using state-of-the-art structural modelling of human capital accumulation to study the impact of exposure to intimate partner violence on children's cognitive and socio-emotional skill development between birth and age 7, using complex longitudinal data from the Avon Longitudinal Study of Parents and Children (ALSPAC). Specialized knowledge required of mathematics- and statistics software and continuous updating on the international research frontier in the area of structural modelling of dynamic capital accumulation.

**Key Tasks**

- To serve as full and equal team member in the development of the project research design and the data requirement.
- Stay updated with the most recent research in the areas of structural modelling of human capital accumulation, most notably latent skills modelling.
- Pilot, refine and optimise mathematical and computational techniques for structural estimation of dynamic capital accumulation models.
- Identify any ethical issues that may limit access to the data and suggest solutions.
- Develop high-level coding skills in Matlab and R for purposes of structural estimation.
- Run diagnostic estimations on the data and present the results.
- Take a leading role in overcoming methodological problems that arise during the project lifespan and discuss progress with the project team in regular team meetings.
- To engage with members of the project’s advisory board in meetings with the board, as well as with other non-academic research users on behalf of the research team.

- Take on joint responsibility with the other team members for developing the projects research manuscripts for peer-reviewed publication.
- Present results from the project at conferences as specified in the grant application.
- Undertaking selected training to advance their professional and personal development in research and impact through taking workshops from the Advance Programme as agreed with the project PI.

- Co-organize the projects two one-day London-based workshops specified in the grant application.
- Organize a workshop also for engagement with non-academic research users as specified in the grant application.

**Other Duties**

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by his/her manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.

**Internal and external relationships**

The following list is not exhaustive but the post holder will be required to liaise with:

- Professor Dan Anderberg, Head of Department and project PI
- Dr Gloria Moroni, Erasmus University, Rotterdam, Project Co-I
- Professor Arnaud Chevalier, Director of the Economics of the Household (EcHo) centre (leading the research cluster in the dept. to which the candidate will be attached)