## JOB DESCRIPTION

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Postdoctoral Research Assistant</th>
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<tbody>
<tr>
<td>Department / Unit:</td>
<td>Biological Sciences</td>
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<tr>
<td>Grade:</td>
<td>RHUL 7</td>
</tr>
<tr>
<td>Accountable to:</td>
<td>Dr Francisco Ubeda</td>
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### Purpose of the Post

The appointee will be responsible for formulating and analysing mathematical models to research the evolution of recombination by means of intra-genomic conflict in relation to the NSF/NERC grant NE/T009322/1. Based on a proven record of academic achievement in modelling she/he will formulate and analyse mathematical models of evolutionary processes related to the evolution of recombination, sex-chromosomes and genomic-imprinting, she/he will prepare manuscripts for publication in international peer-reviewed journals. She/he will interact regularly with the PI but will be encouraged to work independently with limited supervision. She/he will also play an active role in disseminating the research findings, including presenting at international conferences, and engaging in outreach activities involving the general public.

### Key Tasks

#### Research duties

1. Plan research into the evolution of recombination via intra-genomic conflict by combining (1) approaches suggested by the PI and set out in the grant proposal (2) self-directed input that is in accordance with the project objectives
2. Pilot, refine and optimise mathematical and computational techniques with limited supervision from the PI
3. Analyse data and compose research manuscripts for peer-reviewed publication
4. Submit abstracts to and present research findings at international conferences
5. Take a leading role in overcoming methodological problems that arise during the project lifespan, and keep the PI up-to-date with the project’s progress
6. Formulate and test new hypotheses arising from the data, where relevant

#### General duties

7. Participate in lab meetings and events, including communicating recent findings to the research group
8. Undertake training as required, including at UK locations outside London and the USA.
9. Represent the research group in meetings with our partner in the USA and also at external meetings, seminars and conferences, either with other members of the group or alone
10. Participate in the supervision of graduate and undergraduate students. The post holder will act as a role model and mentor to undergraduate students carrying our research projects in the research group. While the PI will be the student’s supervisor, the PDRA will provide day-to-day support and advice.

11. Develop an understanding of Health and Safety issues inherent in the research, and participate in the risk assessment and mitigation process.

12. Participate in public engagement activities, such as open days and science fairs in general and those related to the grant in particular.

13. Lecture in topics related to the research.

14. Help to organize occasional conferences, discussion groups and specialist meetings at Royal Holloway in general and those related to the grant in particular.

Any other duties as required by the Dr Ubeda that are commensurate with the grade.

As the needs of the College change so the above job profile, duties and location of the role within the Faculty of the College will be adjusted accordingly.

<table>
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<tr>
<th>Other Duties</th>
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<tr>
<td>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.</td>
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The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted. |