

THE FRIENDS OF THE UNIVERSITY OF READING**GRANT APPLICATION FORM**

The Friends welcome applications from across the University and associated organisations that support projects which promote the welfare of the University, develop public interest in its work and aid its outreach activities. Grants will not normally be made for expenditure which would generally be funded from University academic resources. Grants are awarded on the condition that they are publicly acknowledged and that the funds are spent by 24 March the following next year. Further information on the grants process and previous grants awarded can be found on <http://thefriends.org.uk>

Name of Project: Incorporating virtual reality into outreach and heritage at the University of Reading

Name of Applicant Dr James Hall + Dr Sarah Allman (Pharmacy), Dr Livia Bartok-Partay (Chemistry)
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School/Dept/Organisation SCFP/University of Reading

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What is the grant to fund? **A virtual reality headset for use in outreach and heritage activities.**

The ability to understand and manipulate three-dimensional (3D) structures is fundamental for communicating key concepts in STEM subjects; particularly how shape and structure determines the properties and function of molecules in both chemistry and biology. In this project we will use virtual reality (VR) to greatly enhance the presentation of 3D structures to secondary school students and members of the public interested in science through outreach and public engagement activities.

Initially, we will design and deliver activities related to healthcare. In this context, VR can be used to help students gain an insight into both human physiology and, the atomic basis of how drugs work. In contrast with costly 3D printed models, VR is versatile and can be used to convey movement and dynamic processes.

We propose to purchase a VR headset to allow us to develop VR-based outreach activities for secondary school students. These will be both delivered in the classroom or at outreach events (such as the Big Bang Fair), and expanded to members of the scientifically curious general public, via events such as Café Scientifique.

We will also be partnering with a local charity, the Rozanda Trust (CAF). The Rozanda Trust have an interest in using VR to enable access to heritage sites for disabled visitors (including school students) in buildings which cannot be fully adapted for those with mobility issues. They have kindly agreed to meet half of the costs involved in purchasing the headset. By partnering with the Rozanda Trust (CAF) (who have access to a 360° camera via their collaboration with the Museum of English Rural Life) we will be able to explore additional possibilities such as recording university lab classes and visit experiences. It is hoped that high-quality immersive VR experiences will enable participation for those whom the cost of physically visiting the University would be prohibitive.

Who will benefit from the Project? Secondary school students, A-level students and the lay public.

Overall project cost (inc VAT) £1511

Amount requested from The Friends £605.50

If the grant requested is not the same as the overall project cost, please indicate how the remainder will be funded:

Rozanda Trust (CAF): £605.50

Department of Pharmacy: £150

Department of Chemistry: £150

Total: £1511

Are there any running costs or other ongoing costs associated with this application, if so how will these be funded? Small amounts will be needed for travel to schools and venues. The departments of Pharmacy and Chemistry are each providing a sum towards these costs.

How will the contribution from The Friends be publicly acknowledged (e.g. by a plaque, website etc)? At every venue The Friends will be acknowledged in an appropriate manner. For example, at Outreach events we will publicly acknowledge The Friends during presentations and include them on handouts. In Heritage sites we can mount a plaque or notice acknowledging The Friends contribution.

Please ensure that this application has the approval of your Head of School / Service/Organisation.

Name of Head Professor Becky Green (Pharmacy)

Email address: Rebecca.green@reading.ac.uk

Name of Head Dr John McKendrick (Chemistry)

Email address: j.e.mckendrick@reading.ac.uk

Please return your application to thefriends@reading.ac.uk by **17 April 2018 with subject heading Grant application.**

If you have not received an acknowledgment within 5 days of submitting your application, please contact us.