COMPREHENSION
1. How does our immune system fight against viruses?
2. What is virus latency, and why can it cause a problem?
3. Why are unborn babies and transplant patients at risk from serious consequences of HCMV?
4. How has HCMV evolved to evade immune detection?
5. Why are viruses useful, to virologists and to humans in general?
6. Why are viruses species-specific, and how do they infect new species?

ANALYSIS
7. Many research groups around the world are attempting to develop an HCMV vaccine. Why is it important that each group shares their failures in this process, as well as their successes?
8. How is the process for developing an HCMV vaccine similar to and different from the process for developing conventional vaccines?

EVALUATION
9. How would you assess whether an HCMV vaccine was effective?
10. Do you think that viruses will become a greater or lesser threat to humans in the future? Explain your reasoning.

ACTIVITIES YOU CAN DO AT HOME OR IN THE CLASSROOM
Imagine that Matt and his team have successfully developed and tested a vaccine for HCMV.

Design a leaflet to explain the benefits of the vaccine for either:
a) Patients awaiting an organ transplant, or
b) Pregnant women

Use non-technical language to explain what a latent virus is and why it is important to get vaccinated.

MORE RESOURCES
• Find out about the research conducted in Matt’s lab: www.reevescmvlab.com
• University College London runs an outreach programme: www.ucl.ac.uk/widening-participation/learners
• CMV Action is a UK charity that provides support and information for those affected by CMV: www.cmvaction.org.uk