



**TRAP AND KILL:** Overexpressing the transcription factor CIITA in cultured human cells turns on a gene called *CD74*, producing the protein p41, which binds to cathepsin proteases in the endosome (left). When the cells are exposed to an Ebola-mimicking virus, the p41-bound cathepsins are unable to cleave off the virus's glycoprotein, stopping it from fusing with the membrane and thus trapping it inside the endosome. Later, the virus is likely brought to lysosomes and destroyed (not pictured). In a cell where *CD74* is not overexpressed (right), cathepsins cleave the virus's glycoproteins, enabling it to fuse with the side of the endosome and release its genetic material into the cytosol.