



Supplementary Figure 4. Photographs of the ratCAVE setup. **(a)** Photograph of the full system showing arena, projector, mirror, cameras (our system uses twelve cameras, arranged about the recording chamber and above the arena; only five (shown with blue lighted rings, normally turned off) are visible here). **(b)** Close-up on the projector, mirror, and cameras. **(c)** Close-up on the arena showing retro-reflective markers attached; the increased brightness of the markers is created in the photo by the camera's flash, and is brightened during VR sessions by the infra-red lighting of the tracking cameras. This increased brightness is beyond the visual spectrum of rodent vision.