

***Spin Glass* by Jenny Walsh, Kate Jeffery and Jeremy Keenan**

Jenny Walsh is an artist who uses glass in combination with other materials to explore the interface between art and science, both examining the role of glass in scientific discoveries, and also using glass to convey scientific concepts. Recently she has become interested in neurons and the dynamism of their interactions, using glass in combination with copper and electronic lighting to create large-scale neural networks. **Kate Jeffery** is a neuroscientist who studies how neurons interact to form internal representations of the world. She focuses on the brain's navigation system and how incoming sensory information is pieced together to form the sense of direction, as well as the internal "map" of space. She has always had an appreciation of glass as an art form and is intrigued by the possibilities of using glass to convey scientific neuroscientific concepts, as well as anatomical facts. **Jeremy Keenan** is an audiovisual artist who uses electronics to play with the properties of sounds and light, and their interactions with the physical world, to create dynamic sensory experiences.

The three met in 2017 and began a collaboration to extend an earlier work by Walsh and Keenan, called *Action Potential*, to the domain of neural computation. Based on Jeffery's work with head direction cells, the new piece, *Spin Glass*, uses light and mirror reflections to express the pattern of neural activation that passes around a network to reflect the current facing direction of a mouse as it explores its environment.



Photograph by Chris Loades (<http://chrisloades.webs.com/>)