THE YEAR IN SCIENCE

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SCIENCE FOR THE CURIOUS

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A NEW wireless system lets research animals move more freely in lab settings.

36 Ultralight Headgear for Mouse Remote Control

Scientists can affect an animal's behavior using a technique called optogenetics: They beam light onto genetically modified neurons, stimulating the production of dopamine and rewarding the animal for specific actions. But the necessary machinery, including unwieldy helmets wired to a nearby light source, restricts the animal's movement, impeding the complex behaviors researchers want to study most.

To get around the problem, University of Illinois materials scientist John Rogers in 2013 developed a smaller, lighter, wireless system. The new micron-scale headgear, embedded with four minuscule light-emitting diodes (LEDs), is just big enough to support a tiny antenna that powers the setup from afar. When Rogers tested the device on mice, he found that, just like larger equipment, it triggered them to prefer one location over another — but without weighing the animals down, and with no wires to tangle up their interactions. —VALERIE ROSS

SERIOUSLY SCIENCE

Beauty and the Booze: Drunken Attraction Is Put to the Test

Are you really as awesome when you're drunk as you think you are? Perhaps not, finds a group of French scientists who probed the effects of alcohol on self-evaluation and published the results in the *British Journal of Psychology*. For their first experiment — conducted at a bar, of course — they asked drinkers to rate how attractive they are. Not surprisingly, the more alcohol a person had consumed, the higher the rating they were likely to give themselves. Next, participants in a staged "taste test" study were given cocktails with or without booze. Half of each group were told they were drinking alcohol, and the other half were told they were given a mocktail. Participants then wrote and delivered speeches and rated how "attractive, bright, original and funny" they considered themselves to be as orators. The team compared these ratings with those of 22 university students who watched the recorded speeches. It turns out that just *thinking* they were drunk made study participants consider themselves to be more attractive. Sadly, according to the independent evaluations, they weren't.

—LILLIAN FRITZ-LAYLIN AND MEREDITH CARPENTER

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