# Electric algae, capsized icebergs and cosmic pillars

January's sharpest science shots, as chosen by *Nature's* art team.

#### **Daniel Cressey**

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The world's oldest snakes, a superstar squid hunter, exoplanets and more have made the cut for the first *Nature* images of the month for 2015.

### Squid hunt



Kent Nishimura

Margaret McFall-Ngai, a zoologist at the University of Wisconsin–Madison, has spent most of her career exploring the relationship between Hawaiian bobtail squid (*Euprymna scolopes*) and the Vibrio fischeri bacteria that live inside these animals. In this picture, shot for a News Feature in *Nature*, McFall-Ngai collects squid specimens in Kaneohe, Hawaii. For more, see 'Here's looking at you, squid'.

#### **Exoplanet excursions**



#### Torture chamber



Chris Gunn/NASA

At NASA's Johnson Space Center in Houston, Texas, sits the giant Chamber A — a huge testing facility that simulates the devastating vacuum and cold of space. In this image, engineers prepare the chamber to test the James Webb Space Telescope, the successor to the Hubble Space Telescope that is due to launch in 2018.

Bloomin' heck!



Kin Cheung/AP

The glittering lights of Hong Kong over the water at night have been joined by an eerie glow. The fluorescent blue is courtesy of a bloom of *Noctiluca scintillans* algae, also known as sea sparkle — a deceptively attractive name for something that is probably caused by pollution from farms.

# Sharper image



Iceberg capsize



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Like many things that float on water, icebergs can capsize. Photographer Alex Cornell captured this haunting image of an upended 'berg in Cierva Cove, Antarctica, in 2014.

#### Hiss-toric record



Julius T. Csotonyi

The world's oldest known snake fossils — dating back some 170 million years — were revealed in a paper in *Nature Communications* this month<sup>1</sup>. This artist's impression shows *Parviraptor estesi* swimming in a freshwater lake.

# Staying dry with lasers

#### Droplets bounce off laser-treated platinum

As winter sets in across much of the Northern Hemisphere, staying dry amid regular downpours becomes a constant challenge. Although many researchers have developed surfaces that repel water, often these are formed using a coating, which can rub off. Researchers from the University of Rochester in New York used a different approach for the 'superhydrophobic effect' shown here: they used lasers to etch a metal surface, forming tiny structures that strongly repel water<sup>2</sup>.

M. Mann/Univ. Rochester

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### References

- 1. Caldwell, M. W., Nydam, R. L., Palci, A. & Apesteguía, S. Nature Commun. 6, 5996 (2015).
- 2. Vorobyev, A. Y. & Guo, C. J. Appl. Phys. 117, 033103 (2015)