From the labs to doctors’ hands
Just before the holidays, the FDA approved a drug that will save lives of young people with the severe form of a disease that causes infants to waste away. Years of basic research by Cold Spring Harbor’s Adrian Krainer enabled him to ask subsequent questions and testing of the drug, which has already helped kids like Emma (photographed here) to take their first steps.

Understanding how zinc affects how we think
Poking out from many neurons in the brains are NMDA receptors, whose faulty operation has been implicated in disorders including Alzheimer’s, schizophrenia and depression. The receptors are naturally regulated by molecules of zinc, whose site of interaction has been mapped for the first time by Hiro Furukawa’s lab.

Our genome’s guardian can break bad
A protein known as p53 has long held the grand title of “guardian of the genome” for the protection it provides against cancer-causing mutations. New work from Raf Faella Sordella’s team suggests that damage can turn this genomic hero into a cancer-aiding villain.

Further reading
* Dr. Robert Maki joins Northwell Health Cancer Institute and CSHL, to direct Center for New Cancer Therapies
* The Brain Atlas (Above Paris Episode 7)