## Trained pigeons ID cancer
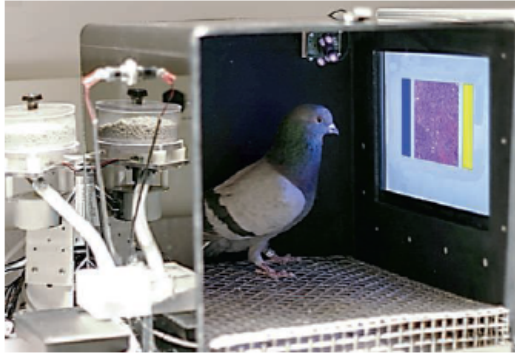
Can birds spot cancer? Like humans, they have excellent visual systems—and they are cheaper to train than medical students. A study this week in *PLOS ONE* put pigeons to the test. Researchers trained the birds to examine microscope images of breast tissue on a computer touchscreen; the birds pecked colored buttons to distinguish cancerous from healthy tissue. If the birds correctly identified cancer, they got a food pellet. In a matter of days, the pigeons' performance improved to better than random; by the end of a month, their accuracy rose to as high as 80%. But the real power came from the flock: By combining identifications from different birds, the accuracy rose to 99%—on par with trained human experts, and better than a computer doing automatic image analysis. So are trained pigeons the future of cancer diagnosis? "I doubt it," says lead author Richard Levenson, a pathologist and technologist at the University of California, Davis. "I suspect that computers will get there first." http://scim.ag/_pigeons



Pigeons peck to identify cancerous tissue.