

Biomedical briefing

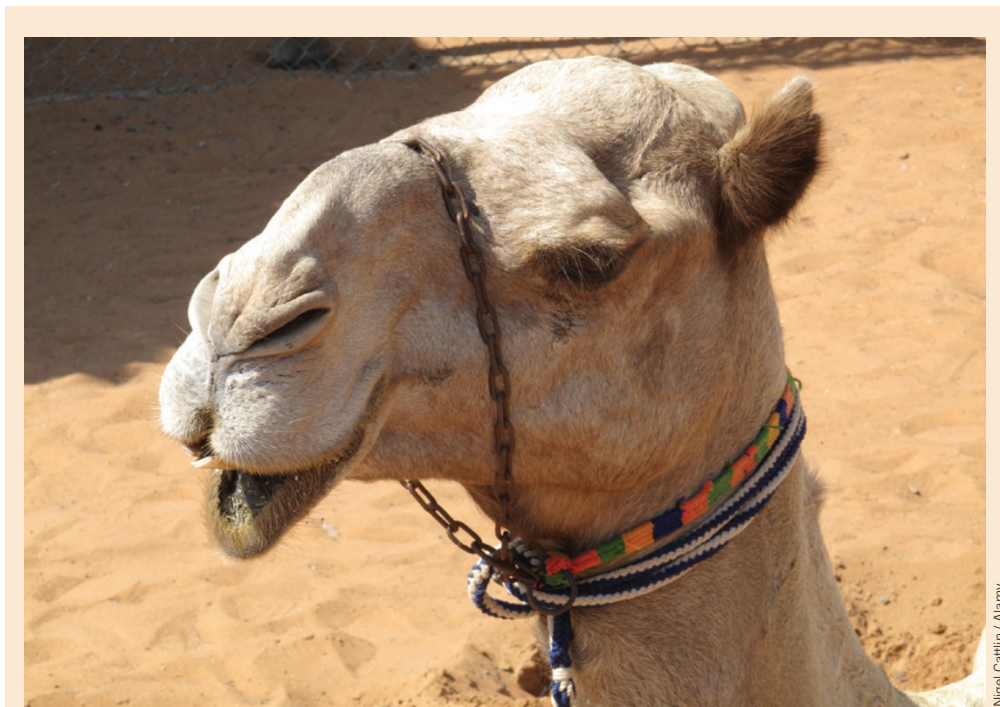
POLICY

Animal ban

The lower house of Italy's parliament approved a bill on 1 August to drastically limit the use of animals in research. The new legislation—which had previously passed the Italian Senate but must still be approved by the country's president to become law—would forbid the use of dogs, cats and nonhuman primates in basic research, ban the breeding of these species in Italy, and prohibit xenotransplantation studies, among other measures. While activists hailed the move as a major victory for animal rights, most biomedical researchers, including Luca Guidotti, an immunologist at the San Raffaele Scientific Institute in Milan, are up in arms. “The general public doesn't understand the impact this would have,” he says.

Cancer cuts

The Spanish National Cancer Research Centre (CNIO) looks set to cut more than 10% of its workforce. In an emergency meeting held on 31 July, the board of the CNIO, which employs more than 470 people (of whom 430 are scientists), endorsed a plan to eliminate 28 staff positions, stop renewing temporary contracts for another 36 workers and reduce wages for those who avoid the axe. The cost cutting comes in response to a projected €8 million (\$10.7 million) shortfall in the CNIO's €45 million 2013 budget. But even balancing the books won't fix the institute's main problems, according to Joan Massagué, a cancer biologist at the Memorial Sloan-Kettering Cancer Center in New York who chairs the CNIO scientific advisory board. “The



Nigel Cattin / Alamy

Arabian camel implicated in MERS outbreak

As scientists around the world continue to hunt for the source of the Middle East respiratory syndrome (MERS) coronavirus, a group of European virologists has implicated a culprit: dromedary camels (*Camelus dromedarius*). As they reported on 9 August in *The Lancet Infectious Diseases* (<http://doi.org/nfb>, 2013), all 50 camels from Oman included in the study tested positive for antibodies against the MERS coronavirus, as did 15 of 105 Spanish camels. In contrast, blood drawn from goats, cattle, sheep and other types of camelids from various geographic locations had no such antibodies. The findings suggest

that the Middle Eastern camels were recently exposed to the deadly agent, but without evidence of live virus in their bodies, it's too early to be sure. “What the study does prove is that we don't know nearly enough,” says Vincent Munster, chief of the Virus Ecology Unit at the US National Institute of Allergy and Infectious Diseases in Hamilton, Montana, who was not involved in the study. Test results from a different set of blood samples, collected from animals in Saudi Arabia, the epicenter of the MERS outbreak, should be available soon, according to virologist Ian Lipkin of Columbia University in New York.

only way forward for CNIO, with or without cost-cutting measures, is to resolve its internal and external political conflicts,” he says.

HeLa genome deal

Scientists seeking to analyze the DNA of HeLa cells can now apply to the US National Institutes of Health (NIH) for permission to access the sequence data, thanks to an agreement reached between the

agency and the descendants of Henrietta Lacks, the woman whose cervical cancer tissue was used without her permission to derive the widely studied cell line. A working group that includes two members of the Lacks family will vet applications, and any resulting research publications must include an acknowledgement to the Lacks family. “We have crafted a path that addresses the family's concerns, includ-

ing consent and privacy, while making the HeLa genomic sequence data available to scientists,” Francis Collins and Kathy Hudson, NIH director and a deputy director, respectively, wrote last month in *Nature* (500, 141–142, 2013). See our editorial on page 1073.

No money for eggs

Citing concern over the potential long-term risks of the egg donation process, California

Governor Jerry Brown last month refused to sign a bill that would have overturned a state ban on paying women for their eggs for research purposes. “Not everything in life is for sale, nor should it be,” Brown wrote in his veto message on 13 August. Although some scientists worry that the move will hamper embryonic stem cell research, Paul Knoepfler, of the University of California–Davis School of Medicine, notes that there are legitimate concerns about the commoditization of eggs. “We have to find a balance between having enough eggs available for research [and] causing unintended consequences,” he says.

BUSINESS

Tivicay okay

The US Food and Drug Administration on 12 August approved a new drug to treat HIV infection for individuals over the age of 12. Dolutegravir, which will be marketed as Tivicay by ViiV Healthcare, a UK-based joint venture between GlaxoSmithKline and Pfizer, is the third HIV inte-

grase inhibitor to reach the market, after raltegravir and elvitegravir. But whereas raltegravir (marketed as Isentress by Merck) must be taken twice daily and elvitegravir (part of Gilead’s four-in-one combination pill Stribild) requires another boosting agent, dolutegravir is a once-daily, stand-alone agent. “In some ways, it captures the best of both worlds,” says Pedro Cahn, an infectious disease specialist at the Juan A Fernandez Hospital in Buenos Aires, Argentina, who led one of dolutegravir’s four pivotal trials. Those trials, which included a total of 2,539 adults, showed that dolutegravir-containing regimens reduced viral loads in both treatment-naïve and treatment-experienced HIV-infected individuals. A fifth trial demonstrated favorable responses in adolescents who had not previously taken another integrase inhibitor.

PEOPLE

Policy professor

Microbiologist Jo Handelsman, a Howard Hughes Medical

Institute (HHMI) investigator at Yale University in New Haven, Connecticut, has been tapped to serve as associate director for science at the White House Office of Science and Technology Policy. As the current president of the American Society for Microbiology and chair of the National Research Council’s Board on Life Sciences, Handelsman (pictured) is no stranger to national forums. “She’s one of the top scientists among top scientists,” says David Asai, senior director for science education at the HHMI.



James Keglley

More online

Malaria vaccine proves highly effective in small trial:
go.nature.com/tSxzWu

New portal offers unfettered access to clinical data:
go.nature.com/shYr1f

Among other nominations also made on 31 July, US President Barack Obama chose France Cordova, an astrophysicist and former chief scientist at the National Aeronautics and Space Administration, as the next director of the National Science Foundation.

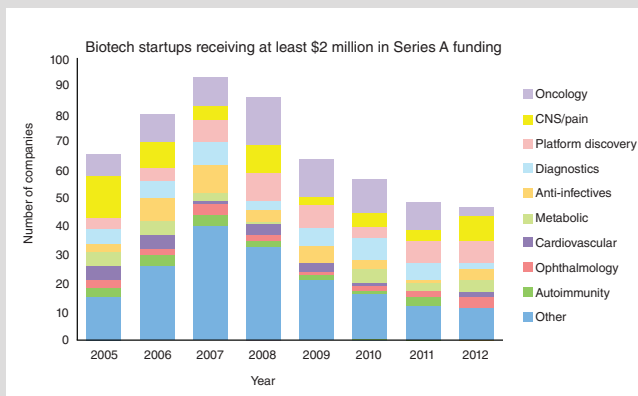
RESEARCH

Take to heart

The list of potential benefits of targeting BET bromodomains continues to grow. In laboratory studies, researchers have shown that JQ1—an experimental drug that blocks BRD4, preventing this bromodomain protein from activating gene expression—can halt the growth of numerous cancer types, activate latent HIV, attenuate lung fibrosis and perhaps even act as a male contraceptive (see go.nature.com/IJ1VhR). Now, reporting last month in *Cell* (154, 569–582, 2013), James Bradner, of the Dana-Farber Cancer Institute in Boston, and Saptarsi Haldar, from the Case Western Reserve University in Cleveland, Ohio, have shown that the drug might help prevent heart failure, too. Working in a mouse model of cardiac disease, they found that JQ1 suppressed pathological gene pathways in heart muscle cells and protected against the formation of scar tissue in the heart wall. “Inhibiting BRD4 has a selective effect on transcription with a broad therapeutic window,” says Bradner, who initially discovered JQ1 in 2009.

As investors turn to later-stage companies, fewer biotechs start up

The number of early-stage biotech startups is dwindling. That’s according to a report released 14 August from Silicon Valley Bank, which found that the number of life sciences companies receiving at least \$2 million in Series A funding, the first significant round of venture capital backing, dropped by 50% between 2007 and 2012. “Later-stage investing is where a lot of folks are trying to put the majority of their money now,” explains Jonathan Norris, a managing director with the California-based bank who authored the report. At the same time, oncology, which has long been the hottest disease area for startups, was the focus of only three new companies last year—although Norris suspects this may be “a blip.” Many of the recent ‘platform discovery’ startups, which are still focused around a technology platform rather than a specific indication, will probably pursue cancer therapeutics once they select a lead asset, he says.



Silicon Valley Bank, VentureSource