

FINDINGS

Comb Your Antennae

Counterintuitively, perhaps, cockroaches are quite fastidious, especially when it comes to their antennae, which the insects clean often, grabbing one with a front leg and drawing it through their mouths. Now, at last, we know why: When restrained or prevented from grooming, American cockroaches develop a shiny, waxy buildup on the antennae that clogs the tiny pores that lead to odor-sensing cells. Measurements of the electrical activity in those cells in response to sex-attractant and food odors showed that the gunk interferes with the roach's sense of smell, the



team reported online on 4 February in the *Proceedings of the National Academy of Sciences*. The insects appear to produce wax continuously, likely to keep from drying out, and grooming helps remove the excess wax as well as dust and other foreign chemicals that land on the antennae and get trapped in the gunk. When they can't groom, carpenter ants, houseflies, and German cockroaches also suffer from gunk overload, suggesting that fastidiousness is widespread.

Science LIVE

Next week, *Science* will be reporting from the AAAS Annual Meeting in Boston. Visit http://scim.ag/aaas_2013 for breaking news, podcasts, and live video chats.

BY THE NUMBERS

93 Number of recently published micro-RNA articles, out of 127, that did not comply with data-sharing guidelines, according to an analysis published this month in *Clinical Chemistry*.

\$100 million Amount of funding provided by the National Football League players union for a 10-year research project at Harvard Medical School to reduce the impact of on-the-field injuries and improve the long-term health of players.

1,000,000 Number of Twitter followers of astrophysicist Neil deGrasse Tyson, who *Time* called one of the world's most influential tweeters in 2011 and 2012.

Random Sample

A Kingdom for a Hearse?

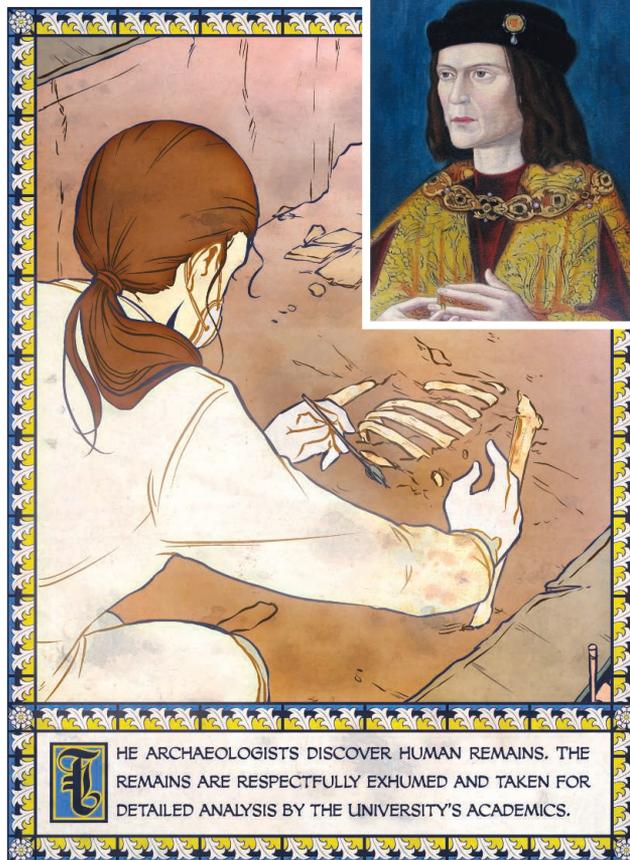
Where a medieval Franciscan monastery once stood in Leicester, U.K., there is now a humble parking lot—which concealed a historical treasure. Human remains found there are “beyond reasonable doubt” those of England's much-maligned monarch Richard III, scientists announced on 4 February at a press conference.

Richard III (inset) died at age 32 at the Battle of Bosworth Field, a battle that ended the bloody civil war known as the Wars of the Roses and established the House of Tudor as the next English dynasty. Last summer, archaeologists excavating the monastery, demolished in the 16th century and long rumored to be Richard III's final resting place, dug up a skeleton in a small grave. The individual was male, in his late 20s to late 30s, and had a feminine build, squaring with historical sources, osteoarchaeologist Jo Appleby of the University of Leicester said at the press conference.

Scientists extracted DNA from the teeth and a thigh bone and compared it to mitochondrial DNA from two known living relatives of the king, both descendants of his sister, Anne of York. It was a match, said geneticist Turi King of the University of Leicester at the press conference.

It's “a spectacular find and a great bit of research,” says battle archaeologist Tony Pollard of the University of Glasgow in the United Kingdom. But, says Ross Barnett, an expert on ancient DNA at the Centre for GeoGenetics at the Natural History Museum of Denmark in Copenhagen, “my preference would have been for this to have occurred in tandem with publication of a peer-reviewed paper.”

Richard III will be reinterred at Leicester Cathedral probably early next year, the mayor of Leicester said. <http://scim.ag/richiii>



THE ARCHAEOLOGISTS DISCOVER HUMAN REMAINS. THE REMAINS ARE RESPECTFULLY EXHUMED AND TAKEN FOR DETAILED ANALYSIS BY THE UNIVERSITY'S ACADEMICS.