a "gut-vascular barrier" that prevents intestinal microbes from accessing the liver and the bloodstream in mice (see the Perspective by Bouziat and Jabri). Studies with human samples and in mice revealed that the cell biology of the gut-vascular barrier shares similarities with the blood-brain barrier of the central nervous system. Pathogenic bacteria such as *Salmonella typhimurium* could penetrate the gut-vascular barrier in mice, gaining access to the liver and bloodstream, in a manner dependent on the *Salmonella* pathogenicity island 2–type III secretion system. — KLM

Science, this issue p. 830; see also p. 742

HUMAN EVOLUTION

Ancient African helps to explain the present

Tracing the migrations of anatomically modern humans has been complicated by human movements both out of and into Africa, especially in relatively recent history. Gallego Llorente *et al*. sequenced an Ethiopian individual, "Mota," who lived approximately 4500 years ago, predating one such wave of individuals into Africa from Eurasia. The genetic information from Mota suggests that present-day Sardinians were the likely source of the Eurasian backflow. Furthermore, 4 to 7% of most African genomes, including Yoruba and Mbuti Pygmies, originated from this Eurasian gene flow. — LMZ

Science, this issue p. 820

GPCR SIGNALING

Receptor methylation controls behavior

D2 dopamine receptors are targeted by antipsychotic agents to regulate behavior. Likhite *et al*. found putative arginine methylation motifs in some human G protein–coupled receptors (GPCRs), including the D2 dopamine receptor, and in homologs in the worm *Caenorhabditis elegans*. Methylation of the D2 dopamine receptor by the arginine methyltransferase PRMT5 enhanced D2 receptor signaling in cultured cells. *C. elegans* lacking *prmt-5* had behavioral problems similar to those in worms deficient in the D2-like receptor DOP-3. Thus, methylation of GPCRs may be important for clinically relevant targets such as the D2 receptor. — JFF

Sci. Signal. **8**, ra115 (2015).

NEUROTECHNOLOGY

Tireless typing with the brain

It's already a technological feat that the brain can be hooked up to a computer to allow paralyzed individuals to type. But these so-called brain-computer interface (BCI) technologies can be tiring and burdensome for users, requiring frequent breaks and recalibration while mentally typing short texts. Jarosiewicz *et al.* combined three calibration methods—retrospective target interference, velocity bias correction, and adaptive tracking of neural features—in the optimal configuration for seamless typing and stable neural control. The combination allowed four individuals with tetraplegia to compose longer texts at their own pace, with no need to pause for recalibration. — MLF

Sci. Transl. Med. **7**, 313ra179 (2015).

CLIMATE CHANGE

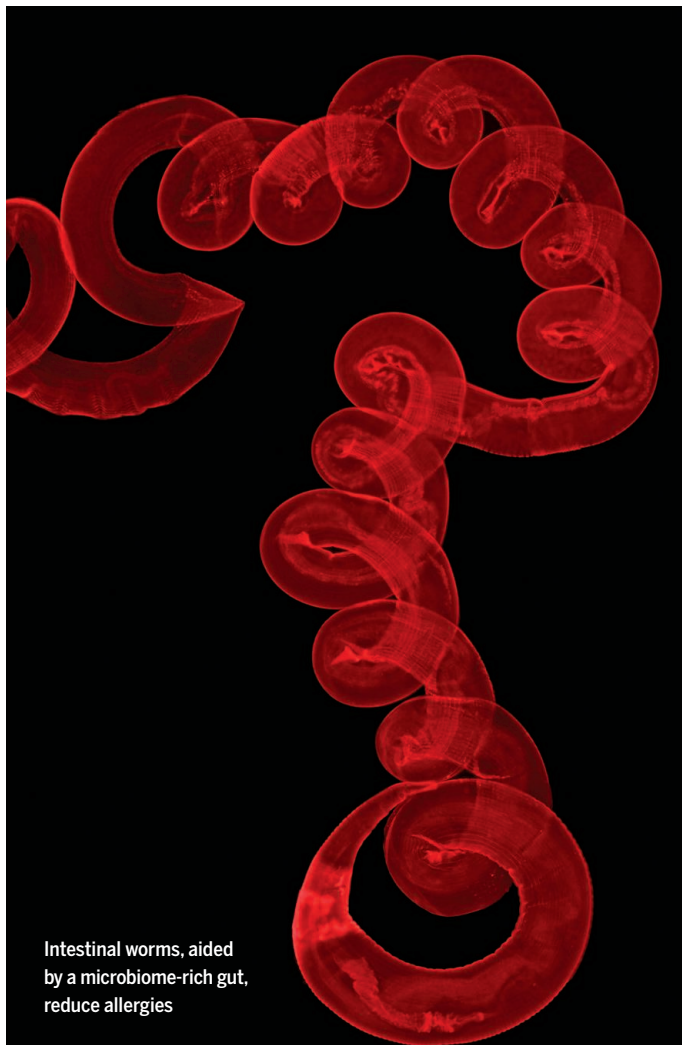
Double jeopardy

In the best of worlds, exploited fish stocks are monitored so that harvest quotas protect the reproductive ability of the population. Climate change is likely to complicate this process substantially. Pershing *et al*. found that cod stocks declined continuously during intense warming in the North Atlantic. Fisheries quotas, even though they were responsibly set and followed by fishers, decreased the reproductive rate. Thus, managing fisheries in a warming world is going to be increasingly problematic. — SNV

Science, this issue p. 809

IN OTHER JOURNALS

Edited by **Sacha Vignieri** *and* **Jesse Smith**



Intestinal worms, aided by a microbiome-rich gut, reduce allergies

IMMUNOLOGY

Worming your way out of allergies

Accumulating evidence suggests that infection with intestinal parasitic worms can protect against allergy. Zaiss et al. investigated how worms reduce allergic reactions, using mice chronically infected with the parasitic worm *Heligmosomoides polygyrus*. They found that worms could reduce the incidence of allergy in mice harboring an intestinal microbiota but not in mice treated with oral antibiotics. The intestinal microbiota of mice infected with *H. polygyrus* produced larger amounts of short-chain fatty acids (SCFAs) than did uninfected mice. Moreover, mice had to express the protein receptor for SCFA in order for worms to protect them from developing allergies. Worm-infected pigs and people also had elevated amounts of SCFAs, suggesting that these metabolites may play a similar role in other organisms. — KLM

Immunity 10.1016/j.immuni.2015.09.012 (2015).

PHOTO: DR JANICE MURRAY, UNIVERSITY OF EDINBURGH/WELLCOME IMAGES