A coronavirus epidemic from 20,000 years ago

An epidemic that swept East Asia was devastating enough to leave an evolutionary imprint on the DNA of those who are alive today, writes Carl Zimmer

**New type of ‘homeodiver’ discovered**

Researchers from The Biodesign Institute and Arizona State University have identified a new type of animal gene, called a ‘homeodiver’, that is responsible for a range of different body plans.

S cientists could be closer to decoding the evolutionary pathways that led to the many different body plans that different species can adopt. The new study suggests that some ‘homeodiver’ genes evolved later in evolution and may have played a key role in the development of new body plans. The team used a combination of genomics and developmental biology approaches to identify the genes responsible for these new body plans.

**Mongoloes live in a fair society**

C ertain human populations are complexly structured. The Mongoloes have a unique genetic lineage that appears to have evolved in response to environmental pressures. Recent research has shown that the Mongoloes are genetically distinct from other Asian populations. These differences have implications for understanding the evolutionary history of human migration and adaptation.

**A ‘quantum compass’ for birds**

B irds are known for their ability to navigate using Earth’s magnetic field, but scientists have long been interested in understanding the underlying mechanisms. A new study suggests that birds possess a ‘quantum compass’ that enables them to navigate using quantum mechanics. The team used a combination of genomics and development biology approaches to identify the genes responsible for these new body plans.