Science & Technology

Study Hall: Fall 2018

Research briefs

Fall 2018



Photo by Colleen Deng

We are family

Columbia geneticist Yaniv Erlich has created the world's largest family tree. It charts the relationships of thirteen million people, dating as far back as eleven generations, using public profiles from the collaborative genealogy website Geni.com. The tree reveals, among other things, that marriage between cousins fell out of favor in

Europe and America around 1875.

Needles to the rescue

A study led by Columbia oncologist Dawn Hershman ’01PH shows that joint pain caused by a common class of breast-cancer drugs can be reduced with acupuncture. The discovery is important, Hershman says, because nearly a quarter of breast-cancer patients who are prescribed aromatase inhibitors stop taking them or cut back on their dosages because of the resulting joint pain.

Missed connections

Humans continue to grow new brain cells throughout adulthood, even into old age, but we may eventually lose the ability to form connections between the neurons, suggests research by Columbia psychiatrist Maura Boldrini. Her discovery, which counters theories that neuron production ceases during adolescence, could help in developing treatments for dementia.

Eat my dust

A natural ecological boundary that runs down the middle of the United States, separating the arid western half of the country from the more verdant East, is gradually shifting eastward as a result of global warming, finds Columbia climate scientist Richard Seager ’90GSAS.

Slow dancing

The gravities of Jupiter and Venus are gently tugging on Earth, causing its orbit to shift every 202,500 years between an elliptical path and a more circular one, according to Columbia researchers Paul Olsen and Dennis Kent ’74GSAS. Their study has implications for understanding Earth’s climate and the development of the solar system.

Pick up the phone

Emergency-room personnel who treat someone who has attempted suicide can significantly reduce the risk of that person making future attempts by placing follow-up phone calls to offer help in finding mental-health care, finds Columbia psychologist Barbara Stanley.

Stoner statistic

Parents with young children at home are increasingly smoking marijuana and are therefore likely exposing their kids to harmful chemicals from secondhand inhalation, according to epidemiologist Renee D. Goodwin ’03PH.



Guide to school abbreviations

All categories >