Science & Technology

7 Discoveries from Columbia Scientists

Bearded dragons may shed light on sleep disorders, and other research news.

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Good night, dragon

By analyzing the neuronal activity of the Australian bearded dragon (pictured above), Columbia biologist Maria Tosches and colleagues from the Max Planck Institute for Brain Research have discovered that a tiny, poorly understood brain region called the claustrum is responsible for “slow wave” sleep — the deeply restful stage when neurons reset their connections and consolidate memories. The

scientists say their work could have implications for treating sleep disorders.

Delegate like a boss

Women in the workplace are less likely than men to delegate tasks to subordinates, which leaves less time for long-term strategic thinking and could hold them back in their careers, according to new research by Modupe Akinola, an associate professor of management at Columbia Business School.

Wine shortage predicted

If the planet continues warming at its current pace, the world's wine-growing regions could shrink by as much as 56 percent by the end of the century, finds a study coauthored by Benjamin Cook of Columbia's Lamont-Doherty Earth Observatory.

Rotten news about the Big Apple

About 20 percent of New York City residents are living below the poverty line at any given time, but a longitudinal study by researchers at Columbia's Center on Poverty and Social Policy provides a more nuanced view of the situation: it shows that nearly half of all New Yorkers spent at least one year impoverished between 2015 and 2018.

Touchy-feely technology

Columbia engineers Matei Ciocarlie '10SEAS and John Kymissis, along with graduate students Pedro Piacenza and Keith Behrman, have developed a new type of robotic finger whose tactile sensitivity rivals a human's. The researchers say that it will enable the creation of highly dexterous prosthetics and robotics for use in industry.

C-sections linked to depression

Women who have general anesthesia during C-sections are twice as likely to experience severe postpartum depression, according to a study by Jean Guglielminotti, an assistant professor of anesthesiology at Columbia University Irving Medical Center.

Little thrill-seekers

Columbia psychologist Nim Tottenham has found that young children are driven to seek out novel experiences, but only in a parent's presence. She says that her study, which is based on laboratory experiments she conducted with preschoolers and their parents, suggests that learning to take risks is a vital aspect of children's psychological growth.

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