

# 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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