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Turkish Government Takes Control of Academy

Members of the Turkish Academy of Sciences (TÜBA) are up in arms about a government decree that strips the academy of its autonomy. They are threatening to resign en masse and form a new academy if the measure isn't reversed.

Among other things, the 27 August law stipulates that from now on, the Turkish government and the Council of Higher Education, which is controlled by the government, will each elect one-third of the academy's members, while the government will also appoint its president. (Currently, academy members elect new members and their president.) "This is interfering with the independence of the academy, thus destroying [its] most important aspect," TÜBA President Yücel Kanpolat writes in an e-mail. Kanpolat says the move is part of a campaign by the government to tighten its grip on Turkish society.

The International Human Rights Network of Academies and Scholarly Societies has asked Turkish Prime Minister Recep Erdoğan to "quickly reverse the legislation."

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NEWSMAKERS

Three Q's

Boarding an airplane could be speedier thanks to **Jason Steffen**, an astrophysicist at Fermi National Accelerator Laboratory in Batavia,



Steffen

Illinois. Three years ago Steffen figured out the fastest way to load a plane, and now he and filmmaker Jon Hotchkiss have tested the method in a pilot for a proposed television show. Steffen's method was twice as fast as row or zone boarding, they report in a paper submitted to the *Journal of Air Transport Management*.

Q: So how does the algorithm work?

Adjacent passengers in the line should be 12 seats apart [counting row by row from the back of a plane with six seats per row]. That limits interferences in which passengers get stuck behind one another in the aisle and eliminates the seat interferences in which passengers have to move past one another in a row. The algorithm, Markov chain optimization, is used all the time in physics and astrophysics.

Random Sample

For Want of a Wolf, the Lynx Was Lost?

The Canadian lynx (*Lynx canadensis*) is thriving in Canada but is a threatened species in the United States. The chain of events that led to the mysterious decline of lynxes in the United States, scientists now say, may have begun with the extirpation of another species: the gray wolf (*Canis lupus*), which was hunted to near extinction in the United States during the 20th century. Today, wolf populations are growing in parts of the west and Minnesota.

The loss of the wolf may have set in motion an "ecological cascade," William Ripple, an ecologist at Oregon State University, Corvallis, and his co-authors write 30 August in *Wildlife Society Bulletin*. Without wolves, populations of coyotes and herbivores (such as elk and deer) have soared—leading to a double whammy for the lynx's primary prey, the snowshoe hare (*Lepus americanus*). First, there are more coyotes to hunt them; and second, elk and deer consume the shrubby cover hares eat and seek for protection from predators. The result: fewer snowshoe hare for the lynx to hunt. Climate change may be another factor; snowshoe hare and lynxes thrive at high elevations with deep snow packs, but milder winters open up these areas to coyotes.

Since their reintroduction to Yellowstone National Park in 1995, wolves have sharply curtailed the coyote population, altered the behavior of both coyotes and herbivores, upped the number of snowshoe hare, and helped restore overall ecosystem health, the authors say. So wildlife managers should consider wolves' "ecological role"—and value as top dog—when deciding their fate.



Q: Were you apprehensive about making the television pilot?

Jon contacted me and asked if I would answer a couple of questions. And I said, "I'll do more than answer questions, I'll help you make the film." This kind of project shows the usefulness of having technically educated people in society.

Q: Do you think your method will be employed?

Could be employed? I'd say yes. Will be employed? That's not my decision. It takes some time to get people lined up, but there's nothing preventing you from doing that while you can't get on the airplane anyway.

FINDINGS

Homing In on Hydrocephalus

Hydrocephalus, an accumulation of fluid in the brain, strikes one in 1500 newborns and can lead to a lifetime of neurological problems. For decades, doctors have known that hydrocephalus typically develops after brain bleeds, but they weren't sure how one led to the other. Now new research has pinpointed a link: A lipid common in blood. When injected at high levels into embryonic mice—just as might happen during a brain bleed—it caused hydrocephalus. Giving

BY THE NUMBERS

\$110,000 Amount that a California science center, which canceled a showing of the intelligent design film *Darwin's Dilemma* in 2009, has to pay to conservative group American Freedom Alliance under terms of a settlement reached 29 August.

\$63.2 billion Amount per year that insomnia is costing the U.S. workforce, according to study published 1 September in *SLEEP*.

animals a compound that stopped the lipid, which is called lysophosphatidic acid (LPA), from binding to its receptors prevented the condition.

The researchers, led by Jerold Chun and Yun Yung at the Scripps Research Institute in San Diego, California, suggest that a flood of LPA from a brain bleed profoundly disrupts the developing brain, particularly the neural progenitor cells. This changes the structure of certain parts of the brain, just as is seen in hydrocephalus. They published the work this week in *Science Translational Medicine*.

http://scim.ag_hydrocephalus