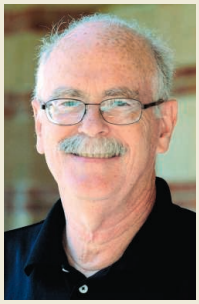
EDITED BY LAUREN SCHENKMAN

Three Q's



Because biomedical researchers tend to study only male rodents, they may miss important differences between the sexes that could help explain, for example, why women are more prone to autoimmune diseases than men are (*Science*, 26 March, p. 1571). **Arthur Arnold**, a neurobiologist at the University of California, Los Angeles, is the editor-in-chief of the new open-access journal *Biology of Sex Differences*.

Q: Why do we need a journal devoted to sex differences?

This journal, unlike most others, will put sex differences front and center and allow us to look at the effects of sex and gender on a wide variety of tissues and disease models and species.

Q: Does it really matter what the sex of a cell line is?

There is a small literature on people who make primary cell cultures, and they do find significant sex differences in gene expression or in susceptibility to stress, or in apoptosis [programmed cell death], et cetera. So in a sense, the cell remembers its sex when you put it in the dish.

Q: Why is it so important to consider sex in studies?

In some cases, when the sex difference is large in a disease, if we can figure out what the protective factors are in one sex, then we may hope to develop new therapies based on enhancing that protective factor in both sexes.

Born Left

Liberal streaks run deep, a new genetic study suggests. James Fowler, a social networks researcher at the University of California, San Diego, and colleagues looked at whether 2574 American teenagers harbored copies of a variant of a dopamine receptor gene, known as *DRD4-R7*, that has been associated with novelty seeking. The team found that teens with the variant were significantly more likely than others to describe themselves as liberal—but only if they also had many friends. Loners were just as conservative as teens without the novelty-seeking variant.

The team looked for *DRD4-R7* because liberals "tend to be more progressive and more receptive to new ideas," Fowler explains. They were surprised to find that friends were a mediating factor, Fowler says. But without friends, "you might spend your time seeking new foods or new experiences" rather than other points of view.

"This is a solid and intriguing paper that could spark lots of future work," says sociologist James Moody of Duke University in Durham, North Carolina. But he cautions that it's also "clearly a first-step paper." Fowler agrees that more work is needed. Still, "it's easy to see there are political personalities," he says. And if genes can influence personalities, they might also influence politics.

Electric Tattoos

Next time you connect with someone, why not make it electric?

Bare Conductive, an electrically conductive ink that can be brushed or stamped onto human skin like normal paint, now makes that possible. The nontoxic, carbon-based, water-soluble ink was developed for artistic purposes by four students at the Royal College of Art in London. Now, a £100,000 grant awarded last month by the British Technology Strategy Board will foster "higher profile projects," says co-inventor Matt Johnson. He imagines applications such as medical devices, physiology monitors, and novel computer-user interfaces.

The ink can make music, too. In a video on the group's Web site (www.bareconductive.com), Scottish pop star Calvin Harris performs one of his singles on a "Humanthesizer," female performers painted with the ink who stand on conductive pads and trigger sounds by dancing and touching one another's hands.

THE SECRET TO SOARING

Oceanographer Philip Richardson first noticed how albatrosses glide with nary a wing flap while watching the great birds from a research ship off the coast of southern Africa. The experience would eventually lead Richardson—now scientist emeritus at the Woods Hole Oceanographic Institution in Massachusetts—to solve a key mystery of bird flight.

Beginning with the 19th century writings of English physicist Lord Rayleigh, more than a century of observation and analysis has shown that the albatross takes advantage of the same variations in near-surface winds that generate waves. Swooping upwind in a zigzag pattern, it can rise from the still air of a wave's trough to catch the gust of wind at the crest. Or, it can skim along the crest, buoyed by the updraft along the wave's face.

To gauge which style of soaring albatrosses depend on most, Richardson created a relatively simple but realistic numerical model of albatross flight. Under typical wind and wave conditions in the Southern Ocean, albatrosses likely draw 80% to 90% of their total flight energy from gust soaring, he reports online in *Progress in Oceanography*. This month, Richardson returns to the far South Atlantic to commune again with nature's greatest gliders.

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