



Three Q's

In August 2010, geophysicist **Eric Calais** temporarily left his faculty post at Purdue University in West Lafayette, Indiana, for a 1-year United Nations appointment in Haiti. His task: advise the Haitian government as it rebuilds cities devastated by this year's earthquake—and help the country prepare for the next one.

Q: What problems is Haiti facing now?

One of the major structural problems is that there are already decisions being made in terms of infrastructure, in terms of planning for the reconstruction, that are not including considerations of seismic-risk reduction or natural hazards in general.

Q: What are the odds of another earthquake?

We know that Port-au-Prince will be impacted by a major earthquake in the future. Can't tell when, but we know it will happen, and we know it can be worse than what happened on January 12, 2010.

Q: What can Haiti do to prepare for that quake?

There are two options: You ignore that threat and do business as usual, or you do not ignore that fact but plan properly for the reconstruction and build properly and educate properly and monitor earthquakes properly. Hopefully, it will hit ... at a time when Haiti will be much more ready than it is now.

Survey Says ...

Do you fill out surveys, or drop them in the trash? Your preference may be genetic.

Researchers at North Carolina State University in Raleigh suspected that genes were involved in survey response (or lack thereof), but didn't know how that role compared with factors such as survey design and cash incentives. To find out, they mailed a survey about leadership activities to 1058 sets of twins—half identical and half fraternal. Using twins ruled out differences in age, gender, and upbringing; the two groups of twin pairs differed only in

how much genetic material they shared.

When the researchers examined who completed the survey and who ignored it, they found that identical twins were more likely to have behaved alike than fraternal twins. "Survey response was 45% heritable," says Lori Foster Thompson, an industrial psychologist and study author. "This means that there must be something in our genetic makeup which predisposes us to survey response or nonresponse." The research will be published in the *Journal of Organizational Behavior*.

Balzan Prizes

A Japanese cell biologist and a Brazilian mathematician are among four scholars named as 2010 Balzan Prize recipients.

Shinya Yamanaka, a professor at the Institute for Integrated Cell-Material Sciences at Kyoto University in Japan, received the prize for his discovery of a technique to transform differentiated adult cells into cells with the characteristics of embryonic stem cells.

Jacob Palis, a professor at the Instituto de Matemática Pura e Aplicada in Rio de Janeiro, was honored for his contributions to the theory of dynamical systems.

Other prize recipients are Carlo Ginzburg, a European historian at the Scuola Normale Superiore di Pisa and Accademia Nazionale dei Lincei, both in Italy; and Manfred Brauneck at the University of Hamburg in Germany for his work on the history of the theater.

The annual prizes are awarded in four disciplines, which vary each year, by the International Balzan Prize Foundation in Milan, Italy. Winners, who are nominated by their institutions, receive 1 million Swiss francs (\$980,000) each, half of which must be spent on research. The prizes will be presented in a November ceremony in Rome.



LARGER THAN LIFE

The twigggy structures Australia's male great bowerbirds (*Ptilonorhynchus nuchalis*) build to attract mates are impressive, adorned with shells, rocks, and bones. Now, research suggests that the embellishments may allow the males to appear larger than they actually are.

Called avenues, the structures are courting areas for male bowerbirds. Researchers suspected that the decorations' placement was aimed at females but didn't know why. So biologists mapped the positions of thousands of objects in front of 33 male bowerbirds' avenues. The decorations were placed by size, from small to large, with the smallest items closest to the entrance. When a female enters the avenue, she sees a male at the far end. The objects' arrangement may make the male look "larger and more conspicuous" from the female's vantage point, says Natalie Doerr, an evolutionary biologist at the University of California, Santa Barbara, and co-author of the study, published online 9 September in *Current Biology*.

When the researchers rearranged the designs, the males put them back in the original order. This behavior suggests that the birds are making deliberate choices, possibly implying some kind of cognitive talent, says Irene Pepperberg, a comparative psychologist at Harvard University. "It's a great study, with valuable new insights about the birds' visual processing," she says.

