Scientists told to cut the gobbledygook

Tom Spears
CanWest News Service

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OTTAWA -- Tired of printing scientific gobbledygook that almost no one can read, one of the world's top science journals has ordered its authors to write plain English.

If the researchers who write for the journal Science can't manage to do this, an editor will rewrite their work as savagely as necessary, at least for the next few weeks.

This ultimatum comes from editor-in-chief Donald Kennedy, who calls it an "experiment."

It's his solution to a problem recognized everywhere in science: The writing becomes more and more technical, until only a few scientists in a particular niche can read any given article.

For this to make any sense, a brief explanation of science journals is necessary.

They aren't magazines. Journals publish new discoveries by scientists. They're a way of announcing who has learned what in a variety of fields. And they check everything: If you publish your discovery in Science, Nature or the British Medical Journal, it means independent experts have judged your research and approved.

This is how scientists around the world stay up to date in their fields.

The catch is that while scientists once wrote plain English (anyone can read Darwin), they don't today. Here's an excerpt from a recent Nature. A cancer researcher is explaining his work. This is his opening sentence:

"AKT activation is driven by membrane localization initiated by the binding of the plekstrin homology domain (PHD) to phosphatidylinositol-3,4,5-triphosphate (PtdIns (3,4,5) P3) or phosphatidylinositol-3,4-diphosphate (PtdIns (3,4) P2), followed by phosphorylation of the regulatory amino acids serine 473 (Ser 473) and threonine 308 (Thr 308)."

Five more pages follow, in small type. It doesn't get any clearer.

It wasn't so bad when scientists at least could read these journals, though untrained lay people couldn't. But now even the scientists are stuck.

Kennedy describes the problem, and the solution, in this week's Science:

"It's clear that accessibility is a problem, because we're all laypeople these days: Each specialty has focused in to a point at which even the occupants of neighbouring fields have trouble understanding each others' papers," he writes in the main editorial.

"Accordingly, we are initiating a new experiment... Each research article published this week and in the next five issues will be preceded by a one-page 'Authors' Summary': an account, with one figure (i.e. chart or map), of what the paper reports and what its conclusions are. Each author will have agreed to supply such an account and to let us improve its accessibility and clarity where needed."
There's more, and it's just as revolutionary:

"Our plan is for summaries of papers in physical science fields (such as astronomy) to be reviewed by our life-sciences editors (such as biology) and vice versa."

Some scientists are already thrilled.

"This is huge," said Roger Pierson of the University of Saskatchewan, a leading expert in human reproduction. "I hope it changes the way we train our young scientists.

"I'm a highly educated individual working at a very high level in a discipline," he explained. "And in many cases, when I pick up a general science journal like Science, or Nature ... half the time I don't even understand what the title (of an article) means."

Cross-fertilization of ideas from one science field to another is a huge source of new ideas, and it's cut off if people can't understand each other's work, he said.

The demands of getting research grants force scientists into a narrow focus, he said. "There comes a time when you have to step back from that and examine the work you do in a broader social context."

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