

# Correspondence

## End the scandal of false cell lines

Cell-line misidentification is a continuing problem (see, for example, *Nature* 457, 935–936; 2009), with an estimated 15% or more of human cell lines not being derived from the claimed source. This means that billions of dollars have been wasted over the past 45 years on producing misleading or false data. Although a few progressive journals and funding bodies demand that cell lines be authenticated, this practice needs to become standard and universal.

Cross-contamination between human cell lines was first described in 1967, yet these same cell lines continue to be used in published studies under their false names and tissue attributions (see *Nature Rev. Cancer* 10, 441–448; 2010).

The method used to authenticate human cell lines is called short-tandem-repeat (STR) profiling, and a standard released by the American National Standards Institute provides protocols (see [go.nature.com/cijups](http://go.nature.com/cijups)). The International Cell Line Authentication Committee (ICLAC) has produced helpful hints for testing authenticity (see [go.nature.com/utig5g](http://go.nature.com/utig5g)) and for incorporating authentication into good tissue-culture practice (see [go.nature.com/jgip8v](http://go.nature.com/jgip8v)).

A rapidly expanding list that already contains more than 400 misidentified cell lines is freely accessible (see [go.nature.com/soppaj](http://go.nature.com/soppaj)) so that anyone can check whether a cell line has already been identified as false. Also, the US National Center for Biotechnology Information is developing a database of reference STR profiles of human cell lines (see [go.nature.com/edfmcj](http://go.nature.com/edfmcj)).

Given that these resources are now available to the scientific community, and once all journals and funding bodies make authentication testing compulsory, the scandalous use of misidentified human cells should finally become a thing of the past.

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*\*On behalf of the ICLAC. For a full list of signatories and competing financial interests, see [go.nature.com/7vadcc](http://go.nature.com/7vadcc).*

## Settle discord over the Southern Ocean

It is alarming that the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) failed to reach consensus over proposals to establish any new large-scale marine protected areas (MPAs) in the Southern Ocean this year (*Nature* <http://doi.org/jxb;2012>). Some members set a worrying precedent by trying to dismiss advice previously agreed by the commission's scientific committee and working groups. The CCAMLR must deliver on its commitments, to uphold its reputation and convince the world that protecting the Antarctic marine ecosystem remains paramount.

The CCAMLR was committed to establishing MPAs by 2012, having designated its first MPA in 2009. Since then, the viewpoints of CCAMLR member states have polarized (see CCAMLR report XXXI; [go.nature.com/fqqpdh](http://go.nature.com/fqqpdh)). These fishing nations may fear that new MPAs could deny them future economic opportunities.

Food security is a vital global issue, and the Southern Ocean, home to one of the last underdeveloped sources of marine protein, Antarctic krill, could be critical. Governments need to recognize that conservation must go hand in hand with sustainable harvesting.

To ensure that their history of cooperation continues, all CCAMLR members should engage in the development process for MPA proposals, evaluating threats to biodiversity and identifying mutually

desirable outcomes. Joint MPA proposals are needed that incorporate data and analyses from as many members as possible. Input from non-governmental organizations that focus on development, as well as from conservationists, would help.

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## Romania needs overseas reviewers

International review has had a positive influence on funding decisions in Romanian universities. As members of the first overseas grant-review panel to operate in the country, we are therefore concerned to learn that the research minister intends to discontinue the use of international referees (*Nature* <http://doi.org/jwn;2012>) in a scheme originally drawn up to improve the country's scientific and ethical standing.

Every proposal we adjudicated — for postdoctoral fellowships or grants for early-stage researchers and senior principal investigators — was evaluated by at least three anonymous international experts and by external rapporteurs. These panels each examined about 100 applications, with particular emphasis on the merit of proposals and on the integrity of CVs. We were impressed by the overall quality of this innovative system.

Young Romanian scientists will be heartened to learn that this round of grant funding met all international standards of scrutiny and peer review. It will be most unfortunate for Romania to thwart this progress towards improving its international research status.

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*\*On behalf of 9 co-authors (see [go.nature.com/m7rdby](http://go.nature.com/m7rdby)).*

## Put soil security on the global agenda

An international coalition of scientists has launched the Soil Carbon Initiative (see [go.nature.com/onhgcv](http://go.nature.com/onhgcv)), convened by the United States Studies Centre and the Faculty of Agriculture at the University of Sydney in Australia, to bring policy on soil security in line with that on food and water security.

Soil security refers to the maintenance and improvement of soils worldwide so that they can continue to provide food, fibre and fresh water, contribute to energy and climate sustainability and help to maintain biodiversity and protect ecosystem goods and services.

Soil carbon needs to be monitored and managed — as was discussed during Global Soil Week in Berlin last month, at a meeting organized by the Institute for Advanced Sustainability Studies in Potsdam, Germany, and its international partners (see [www.globalsoilweek.org](http://www.globalsoilweek.org)). Also on the agenda were topics such as carbon trading and 'zero net land degradation' (see [go.nature.com/d1y4g3](http://go.nature.com/d1y4g3)).

Although scientists have made significant inroads into understanding soil function, international policy must keep pace with these advances.  
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### CONTRIBUTIONS

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**Supplementary information to:  
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