

Limits on computation?

LETTERS I BOOKS I POLICY FORUM I EDUCATION FORUM I PERSPECTIVES

LETTERS

edited by Jennifer Sills

Outsourced Psychiatry: Remote Support

IN HIS NEWS FOCUS STORY "WHO NEEDS PSYCHIATRISTS?" (16 MARCH, p. 1294), G. Miller highlights the burgeoning psychiatric morbidities in regions left devastated by conflict. Social media can now provide access to an additional conduit of expertise, which can offer remote support and help in constructing virtual healthcare architecture in politically fragile nations. In Somaliland, with a population of 3.5 million people, United Kingdom-based organizations are already using social networking portals to support continuing medical education for interns (1) and to provide real-time mentoring for doctors managing challenging psychiatry cases. This support is crucial in a country with no psychiatrists in the public sector and in which chaining affected patients to the floor is common. With an unpredictable political climate limiting interventions by foreign agencies, social networks provide a practical means of offering regular, intercontinental support to doctors who would otherwise be isolated. Such technology could further be deployed to gather electronic healthcare workforce records, augment coordination of clinical trials, and monitor health economies. The disparities in medical capacity between Northern and Southern partners are already narrowing. If security and identity verification are safeguarded, social media could rapidly accelerate progress.

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References and Notes

- 1. A. E. Finlayson et al., J. Telemed. Telecare 16,
- 2. All authors are affiliates of medicineafrica.com, a social enterprise providing a platform for healthcare educational partnerships.

Looking for help. An overcrowded mental hospital in Banda Aceh, Indonesia.



Outsourced Psychiatry: Experts Still Relevant

THE NEWS FOCUS STORY ON GLOBAL MENtal health, "Who needs psychiatrists?" (G. Miller, 16 March, p. 1294), implied that the answer is "no one." This is not the case.

It is true that clinical trials have demonstrated the efficacy of talking therapies for depression, anxiety, and other common mental disorders, when delivered by nonpsychiatrist health workers trained by professionals. Severely ill individuals (such as those with refractory depression, bipolar disorder, or schizophrenia) require medication, which can be administered safely by nurses, family doctors, and even health workers supervised by medical personnel. Investing in community health workers as mental health gatekeepers is the safest national strategy for sustainable mental health programs, for the reasons mentioned in the News Focus story as well as an additional one: Community health workers are not as susceptible to "brain drain"—the emigration of skilled workers for better working conditions—as health professionals.

For quality care, however, psychiatrists are needed for overall direction/supervision and training in differential diagnosis and medication management, especially when addressing complex comorbidities (mental as well as physical). Psychiatrists play a crucial role as consultants in these international projects.

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Sound and Fury, Clarified

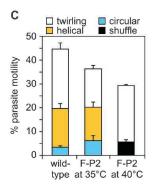
IT WAS AN HONOR TO HAVE MY PROFILE PUBlished in Science ("Sound and fury in the microbiology lab," C. Mary, News Focus, 2 March, p. 1033). However, I was surprised that 20% of the article is devoted to the American Society for Microbiology (ASM) story, in which I was a collateral victim of a collective sanction (there has been no collective liability in France since World War II). I did not manage the paper and did not even check the last version. The mistake by C. Capo consists of a single figure inversion (not four, as stated in the Science profile). This paper has since been published (1). In January 2007, I was awarded one of 불

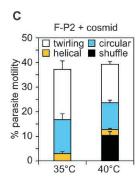
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CORRECTIONS AND CLARIFICATIONS

News Focus: "Sound and fury in the microbiology lab" by C. Mary (2 March, p. 1033). The article said that a reviewer for *Infection and Immunity* raised concerns about four figures in a revised manuscript by Raoult and colleagues. The article should have made clear that at issue were panels within a single figure of the revised manuscript. As the article stated, one author acknowledged he had made a mistake, but only two panels were in error.

Reports: "A DOC2 protein identified by mutational profiling is essential for apicomplexan parasite exocytosis" by A. Farrell *et al.* (13 January, p. 218). There were labeling errors in Figs. 1C and 3C. In Fig. 1C (left), the *y* axis should run from 0 to 50%, not 0 to 100%. In Fig. 3C (right), the labels on the *x* axis, 35°C and 40°C, should be transposed. The corrected figure panels are presented here.





the highest ASM honors—the ICAAC lecture—thus clearing doubts about my scientific integrity.

I find it interesting that the Web site (2) of the profile's author, C. Mary, states that she works for Danone, a Paris-based food products company. My recent work on the putative role of probiotics in obesity (3-5) [reported in my book (6)] led to bad press for Danone and forced them to review their marketing strategy [e.g., (7)].

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- 5. S. D. Ehrlich, Nat. Rev. Microbiol. 7, 901 (2009).
- 6. D. Raoult, *Dépasser Darwin* (Plon, Paris, ed. 1, 2010).
- MarketingAttitude.net, Activia ou le Scandale de Danone (www.marketingattitude.net/2012/01/activia-oule-scandale-de-danone) [in French].

Letters to the Editor

Letters (~300 words) discuss material published in *Science* in the past 3 months or matters of general interest. Letters are not acknowledged upon receipt. Whether published in full or in part, Letters are subject to editing for clarity and space. Letters submitted, published, or posted elsewhere, in print or online, will be disqualified. To submit a Letter, go to www.submit2science.org.

Response

RAOULT IS REFERRING TO A WEB SITE THAT IS out of date. My collaboration with Danone is limited to writing two newsletters in 2002 and 2003; I have had no contact with Danone representatives for more than 9 years.

CATHERINE MARY

Cultural Diversity in a Global Society

IN HER EDITORIAL "THE GLOBAL KNOWLEDGE society" (3 February, p. 503), N. V. Fedoroff argues that "creating a truly global knowledge society" would empower humanity to solve its common problems. However, she neglects to acknowledge that humanity's problems, although shared, are inextricable from local cultural and ecological contexts. Knowledge may be empowering as a solution to these problems, but it often empowers inequitably. With these disparities, a "global knowledge society" could harm certain cultures and cause loss in the world's cultural diversity. For example, the globalization of the knowledge of traditional Chinese medicine has escalated demands for medicinal materials to beyond local ecological capacities, putting thousands of wild Chinese herbs at risk of extinction (1), and consequently damaging this treasured cultural practice.

Preserving the world's cultural diversity at a time of globalization—of both knowledge and economy—is in humanity's own interest of future viability. The world needs not one homogenized global knowledge society, as

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the Editorial suggests, but a global mosaic of multiple, pluralistic knowledge societies, each rooted in its own unique cultural identity. This latter view reflects the idea of "knowledge societies" espoused by the United Nations Educational, Scientific, and Cultural Organization (UNESCO)—"the plural here," the organization asserts in a report, "sanctions the need for an accepted diversity" (2).

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Science Statesmanship

THE NATIONAL ACADEMY OF SCIENCES HAS reported the decline in U.S. science, technology, engineering, and mathematics (STEM) education time and time again (1, 2). Despite these findings, the federal government has not substantially increased its funding of science education.

North Carolina has found a creative solution by leveraging its own (albeit limited) state budget. The state science museum has been transformed into a hub for science research, education, and outreach technologies. Called the Nature Research Center (NRC), a new 24,000-m² wing of the existing museum was funded through public-private partnerships, creating a statewide "one-stop shop" for all facets of science education. All K-12 classrooms in North Carolina are linked through the Internet to the NRC's multimedia technology theater, where scientists will broadcast their discoveries. Technology platforms in the NRC foster science communication to diverse audiences throughout the state (and beyond), including K-12, citizens, educators, and policy-makers.

STEM education is a responsibility for everyone-federal, state, and local governments, as well as parents and students themselves. By creating a hub for cutting-edge science research, education, and communication, North Carolina is ensuring a strong pipeline of exceptional STEM students into MARGARET DALZELL LOWMAN the workforce.

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