

Dear Nature Medicine:

I appreciate that Margaret Goodell's review of *Cell of Cells* says my book gets "most" facts right and is "beautifully described" (*Nat. Med.* 6/08), but I welcome the chance to correct errors. Much can be verified with Amazon's "Look Inside."

Goodell, misspelling "McCulloch," says I skip the work of McCulloch and Till. No. Please see pp. 94, 236, 478, 491.

Goodell says I miss the iPS cells of Kyoto's Shinya Yamanaka. No. Please see the most recent, prominent section (p. xii): "Kyoto University has reported that the first mature mammal cells have been cranked backward in a lab to become ES-like sans cloning." She says his 8/25/06 mouse iPS paper was out in time for me to make big changes for it, but that was four months before book press copy time. No big changes allowed. Goodell says I should have, regardless, written at length about both mouse and human iPS cells long before publication even though human iPS work wouldn't be published until November 2007, eight months after *Cells* came out. This is clearly untrue. Most lab work, let alone explosive lab work, should be written up at length only when published. In stem cells, even published work is oft wrong, as Goodell knows (Holden, C., *Science*, 6/21/02). In our March 2004 interview, translated by the Foreign Press Center Japan, Yamanaka advised me to await publication to highlight iPS cells, calling them tumorous and unlike ES cells. Indeed, in June 2007, when my book had been in bookstores for three months, he still couldn't make human iPS cells. He told *The New York Times* (12/11/07): "Back in June...I would have told you the same four genes wouldn't work in humans." And even a year after publication of the human iPS work, in November 2008, James Thomson, another iPS pioneer, was seeing some "dark clouds" (Clark, S., *WTN News*, 1/5/09). My decision to wait for publication met top science writing standards.

Goodell says, told of Old City danger, I felt "compelled to go (without incident)...as if stem cells were...prophesied." The danger was no rumor. (See p. 102: "The Old City's tourist center has been shuttered because of the violence.") And I went to see if the violence would repel experts. (See p. 102: "People...have been killed in there.' But for anyone trying to figure out how or if it's possible for a stable stem cell industry to...retain its leadership here, the Old City would appear to be the center of the storm;" pp. 70-71: "Since the intifada started in 2000, there have been 900 violent Israeli deaths, with most...this year. Can Israel retain its lead in the stem cell world under these conditions?") Some Israelis downplayed the violence's impact (pp. 72, 110, 111). My job was to see for myself. There was "incident." Vendors yelled "jew" and warned we'd be robbed (pp. 102-103). A bomb a day went off, one by my hotel (p. 7). Visits to violent areas weren't remotely about "religion." They let me conclude US scientists may stay away—as they did.

Chapter titles "In the Beginning" and "Scientific Pilgrimages" were not chosen to instill religious awe; both are clear puns. "Scientific Pilgrimages" was *Science's* (Vogel, G., 3/8/02): "Israeli labs are becoming ever more popular, with scientists from half a dozen countries making

pilgrimages to Jerusalem or Haifa to learn from the masters....” (Echoes *Cell*’s p. 70: “So many scientists came...(Science) actually used the word ‘pilgrimage’.”). “In the Beginning” was a similarly playful way to signal the field’s start.

I never call clinicians “saviors”; “cures” a “miracle”; the field “ancient.” The book ironically notes some considered Israeli ES cell scientists —*not* clinicians— “saviors” of ES cell science for doing lab work barred in the US (p. 88). I *condemn* a “miracle” therapy (pp. 337, 357-366). *Cells* called the field “nascent,” never “ancient” (p. 26).

Goodell says I portray as key some events and people of “transient” import. This claim, with its lack of backup, casts needless aspersions on everyone in *Cells*. *Cells* is not an “historian’s” textbook of science wins, as Goodell repeatedly paints it, but a journalistic, largely present-tense account of recent politics and science, detailing wins *and* losses of competing nations and labs.

And the book’s scientists were clearly not chosen for oratory over work. Most of the world’s top stem-cell experts are in *Cells*, as *Nature* notes (“Few of the mainstream players are missed out”). Their work is well assessed, says *Nature* (“the portrait that Fox paints of stem-cell science and politics, and of the talented (sometimes flawed) individuals involved, is faithful to reality”); *Science* (“Fox accurately reveals the sociological and technical issues that stem cell research involves...The knowledge she acquired...is astonishing in range and depth”); *The Lancet* (“Dozens of key stem cell scientists get personality profiles, as well as a thorough accounting of their work and thought”); *The Times Literary Supplement* (“a wonderful book for the biologist, containing hundreds of interviews, thoroughly referenced citations, and careful notes....scholarship and thoroughness”); *The Economist* (“...scientists (are drawn with) realistic humanity...refreshingly unideological”). See <http://sites.google.com/site/cynthiaffox/>.

I repeatedly note cloning makes pluripotent cells (pp. 10, 157, 342-343, 461).

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