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Competing interests statement The authors declare that they have no competing financial interests

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retractions

A cytosolic catalase is needed to extend adult lifespan in *C. elegans daf-C* and *clk-1* mutants

J. Taub, J. F. Lau, C. Ma, J. H. Hahn, R. Hoque, J. Rothblatt & M. Chalfie

Nature 399, 162-166 (1999).

We no longer have confidence in our observations associating a reduction in adult lifespan with a putative mutation in the *Caenorhabditis elegans* catalase gene *ctl-1* and therefore retract this paper. With the assistance of J. Liang and C. Keller, we have confirmed that *C. elegans* has multiple catalase genes (actually three in tandem) and that the original strain, TU1061, has decreased transcription of *ctl-1* messenger RNA. However, we have also found several errors, one identifying a single nucleotide deletion as the defect in the putative *ctl-1* mutation and others in the identification of strains carrying mutations in multiple genes. In particular, we have not seen the expected reduction in *ctl-1* mRNA in other

strains tested. The longevity results obtained with these strains are therefore meaningless. We are grateful to our colleagues, particularly C. Kenyon and M. Crowder, for conveying to us their concerns about our results.

Metal-insulator transition in chains with correlated disorder

Pedro Carpena, Pedro Bernaola-Galván, Plamen Ch. Ivanov & H. Eugene Stanley

Nature 418, 955-959 (2002).

This Letter reported numerical simulations of one-dimensional disordered binary systems, and found a threshold value for the exponent characterizing the long-range power-law correlations of the system. Below this threshold, the system behaves as an insulator and above it, in the thermodynamic limit, the system behaves as a conductor. Unfortunately, we have now found that this observation was a consequence of the algorithm used to generate long-range correlations in binary chains, because above the threshold value of the exponent only a finite number of segments of atoms of the same type (A or B) exists, even in the thermodynamic limit of an infinitely large system. Thus, the system studied was not truly disordered. As a result, what we observed at the critical threshold value for the correlation exponent was not a transition from insulator to metal behaviour in a disordered system (as reported), but a transition from a disordered to an ordered system. For this reason, the authors retract the claim of a metal-insulator transition in the infinite binary chain with correlated disorder. The results are still valid that relate to the behaviour of a binary chain below the critical threshold value of the correlation exponent, and to large but finite system sizes (as found in the DNA example discussed in the Letter).

We thank L. Hufnagel and T. Geisel for drawing this to our attention. $\hfill\Box$

erratum

Wave-like properties of solar supergranulation

L. Gizon, T. L. Duvall Jr & J. Schou

Nature 421, 43-44 (2003).

In Fig. 1, the units of frequency should be microhertz (μ Hz), not millihertz (mHz). In the US-printed issues, Fig. 3b appeared blurred