acting through hydraulic coupling of chorda with hair is sufficient to explain the sensitivity of the thread hairs to pressure[6].

The geometry of the proposed system is adequate to account for the way pressure alters the hair receptor firing patterns during oscillation. For example, during angular displacement, the chordae of upper and lower thread hairs will be displaced in opposite directions relative to the neurons[7]. Pressure increase will cause chorda displacements away from the neurons in both groups of thread hairs. Some statocyst interneurons are known to integrate activity from these groups of thread hairs separately, and these could have a role in sensing changes in pressure as well as the equilibrium state[10].

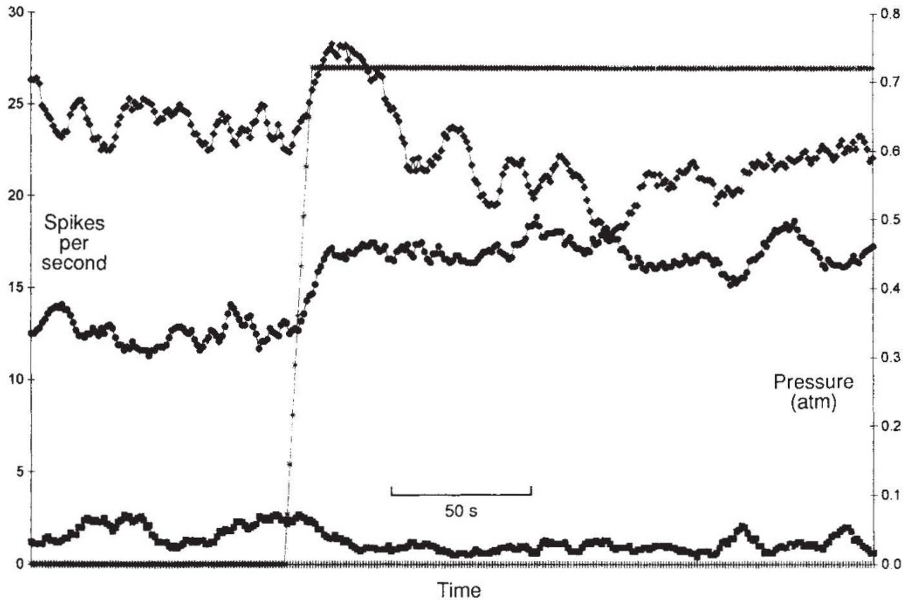

FIG. 1 Thread hair spike frequencies from an isolated antennule of the crab *Carcinus maenas*. Counts per second from three successive spike height ranges of an extracellular recording and the hydrostatic pressure were smoothed by a 10 point running average (smoothed units 1, 2 and 3 and smoothed pressure). Recording showing tonic increase, tonic decrease and phasic increase followed by tonic decrease in resting activity following an applied step of pressure 0.72 atm above ambient. Pressure was applied using compressed nitrogen over liquid paraffin in a pressure chamber similar to that used in ref. 11. Top trace, smoothed units 3; middle trace, smoothed units 1; bottom trace, smoothed units 2; (*) smoothed pressure.

Peter J. Fraser,
Department of Zoology,
University of Aberdeen,
Tillydrone Avenue,
Aberdeen AB9 2TN, UK
Alister G. Macdonald
Department of Biomedical Sciences,
University of Aberdeen,
Marischal College,
Aberdeen, AB9 1AS, UK

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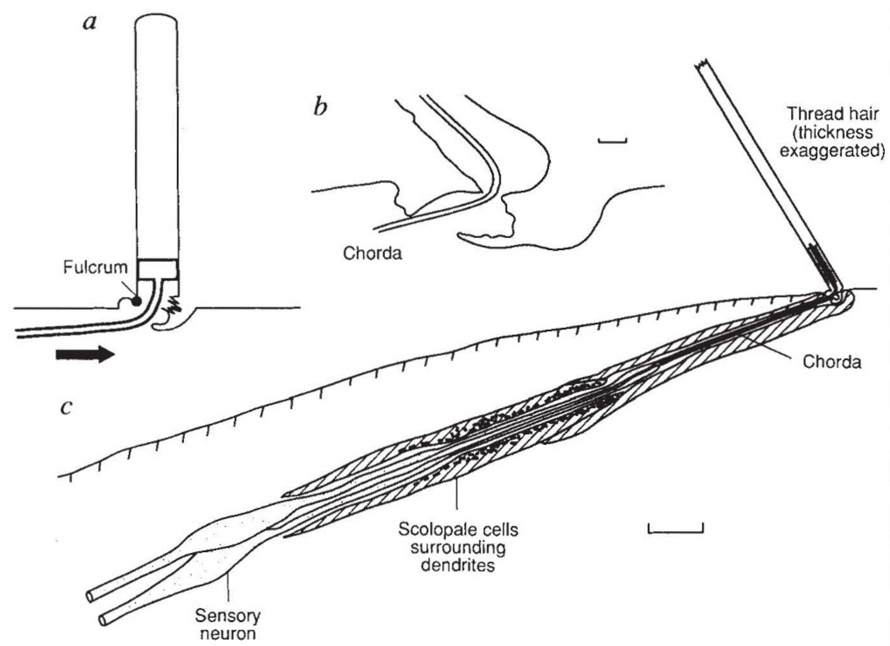

FIG. 2 *a*, Diagram of thread hair and chorda showing fulcrum at left base of hair and hydraulic coupling of chorda represented as a plunger in the hair shaft. Anticlockwise angular displacement of the hair leads to chorda displacement in the direction shown by the arrow. Increased pressure is postulated to lead to decreased fluid volume in the hair, causing displacement of the chorda in the direction shown by the arrow. *b*, Detail of hair base drawn from electron micrograph section. Scale bar, 1 μm. *c*, Reconstruction of bipolar neurons, scolopale cells surrounding the ciliary segment of the dendrites and chorda running from distal dendrites into the shaft of the thread hair. Scale bar, 20 μm.

Cheap fullerenes

SIR — The report by J. L. Atwood *et al.* (*Nature* **368**, 229–231; 1994) that C_{60} and C_{70} form inclusion complexes with calixarenes is a significant addition to our rapidly expanding knowledge of the complex chemistry of fullerenes. But the authors base their claim of the possibility of a 50-fold reduction in the cost of producing purified fullerenes on the retail prices quoted by Aldrich, $2,800 and $10,700 per gram for C_{60} and C_{70}, respectively.

Although Aldrich enjoys a reputation as a convenient supplier of high-quality fine chemicals for laboratory use, it is also one of the most expensive commercial sources of fullerenes. At the time when the paper by Atwood *et al.* was submitted for publication, fullerene manufacturers in the United States were offering purified C_{60} and C_{70} at retail prices of $150–$350 and $1,250–$3,500 per gram, respectively, in 1-gram quantities. As of March 1994 these prices had fallen to $100–$225 and $600–$3,000 per gram, respectively, with substantial discounts available for large orders.

David Lane
Pacific Fullerene Specialties,
370 Altair Way #183
Sunnyvale, California 94086, USA