

PRIONS

... "It now appears that an infectious agent named a prion may stand out as a remarkable exception to the rule that every organism carries nucleic acids defining its own identity. The prion is known to be capable of initiating the production of new prions, at least in certain mammalian cells. Moreover, among the molecular components of the prion there is at least one protein, and so one would expect to find a DNA or RNA template specifying the structure of the protein. The evidence gathered so far, indicates the prion has no nucleic acid at all. Even if some DNA or RNA is ultimately found in the prion, there is probably not enough to encode the structure of the protein. From these facts it does not necessarily follow that the prion

violates the central dogma—the latest results favor less heretical hypotheses—but there is little question its mode of reproduction is highly unusual. Two diseases are known to be caused by prions. They are scrapie, a neurological disorder of sheep and goats, and Creutzfeldt-Jakob disease, a rare human dementia that recently came to public notice when it was identified as the cause of the death of the choreographer George Balanchine." [(Stanley B. Prusiner in *Scientific American*, 251(4): 50–9, Oct 84) (Reproduced with permission from Press Digest, *Current Contents*®, No. 52, December 25, 1984, p. 12. Published by the Institute for Scientific Information®, Philadelphia, PA, USA.)]

THE INSTITUTE AWARDS FOR 1985

The Council of The Institute of Physics has made the following awards for 1985: the presentation of the Awards will be made in London on 8 May 1985.

Guthrie Medal and Prize to Dr M. Pepper of the GEC Hirst Research Centre, Wembley, and the University of Cambridge, for his pioneering experimental work on the physics of 2-dimensional systems.

Glazebrook Medal and Prize to Professor Sir John Gunn of the University of Glasgow, for his contributions to the establishment of large UK facilities for physics research through his chairmanship of the SERC Nuclear Physics Board and of the UGC Physical Sciences Sub-Committee.

Bragg Medal and Prize to Professor E. Rogers of the Nuffield Foundation, for his many contributions to physics education in the United States and the United Kingdom through his lectures, writing, and work on both the PSSC and Nuffield teaching projects.

Charles Chree Medal and Prize to Dr A. E. Gill of the University of Oxford, for his outstanding contributions to geophysical fluid dynamics.

Charles Vernon Boys Prize to Dr D. J. Smith of Arizona State University, for his achievements in commissioning the Cambridge 600 kV high resolution electron microscope and applying it to the elucidation of the atomic structure of materials.

Duddell Medal and Prize to Dr C. E. Webb of the University of Oxford, for his outstanding contributions to the development of gas and vapour lasers.

Maxwell Medal and Prize to Dr A. J. Bray of the University of Manchester, and Dr A. P. Young of the Imperial College of Science and Technology, London, jointly for their contributions to the theory of disordered systems and particularly for their recent work on spin glasses.

Paterson Medal and Prize to Dr C. E. C. Wood of the GEC Hirst Research Centre, Wembley, for his pioneering work on the application of Molecular Beam Epitaxy to the design and fabrication of novel devices and structures.

Thomas Young Medal and Prize to Dr J. D. Lawson of the Rutherford Appleton Laboratory, Chilton, Didcot, for his many contributions in the field of charged particle beams.

Max Born Medal and Prize awarded jointly with the German Physical Society made in alternate years to a British and German physicist. The 1985 Medal and Prize has been awarded by the Council of the German Physical Society to Professor G. R. Isaak of the University of Birmingham for his outstanding contributions to Moessbauer effect, earth and solar physics. The presentation will take place on 13 March during the Society's annual meeting at the University of Munich, West Germany.

Prize for the 1984 Graduateship Examination of The Institute of Physics to Mr B. J. Hawdon of the Dublin College of Technology, for his outstanding performance in the Graduateship examination.