

ANNOUNCING A SPECIAL ISSUE GENETICS OF CANCER

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Announcement

Genetics of Cancer—Special Issue

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RECENTLY the BRCA1 breast (and ovarian) cancer gene has been isolated [1] and the BRCA2 gene has been assigned a chromosomal location [2]. The interest surrounding these reports and the nature of the findings are commented upon by Tim Bishop in this issue [3]. However, the fact that mutation of BRCA1 is uncommon in sporadic cases of breast and ovarian tumours suggests that this gene is not critical for the development of the majority of such cancers [4]. This leaves us with the fact that, as with many other genetic lesions identified in cancer development, the major implications of these discoveries lie, in the short-term at least, in the prospects for genetic screening. The application of such tests clearly opens a Pandora's box of ethical and practical dilemmas [5].

The time though is right for a summation of what is known regarding the molecular lesions involved in neoplasia, and it is apposite that the *European Journal of Cancer* should be devoting a Special Issue to the Genetics of Cancer. The guest editors, Nicholas Lemoine and Helen Hurst, are to be congratulated on bringing together so many distinguished contributors in this volume. At this time, the ability of science to detect and identify specific genes involved in turnorigenesis outstrips our ability to

use such information therapeutically. However, this will not always be the case. Screening must be followed by the ability to offer rational treatment or prophylaxis, and such approaches may soon be founded on the nature of the identified genes. For this reason, the Special Issue represents no more than a "snapshot" of the state-of-play in 1994, but still should be required reading for all those interested in understanding not only the depth of our knowledge but also the depth of our ignorance. Hopefully, the balance between these two areas will now begin to shift in the required direction at an increasing rate.

- 1. Miki Y, Swensen J, Shattuck-Eidens D, et al. Isolation of BRCA1, the 17q-linked breast and ovarian cancer susceptibility gene. Science 266 (5182), 66-71.
- Wooster R, Neuhausen SL, Mangion J, et al. Localization of a breast cancer susceptibility gene, BRCA2, to chromosome 13q12-13. Science 265 (5181), 2088–2090.
- 265 (5181), 2088-2090.
 Bishop, T. BRCA1, BRCA2, BRCA3... A myriad of breast cancer genes. Eur J Cancer 1994, 30A, 1738-1739.
- Futreal PA, Liu Q, Shattuck-Eidens D, et al. BRCA1 mutations in primary breast and ovarian carcinomas. Science 266 (5182), 120–121.
- Ponder B. Breast cancer genes: searches begin and end. Nature 1994, 371, 279.