

British approve of genetic research but have little confidence in state regulation of data

Most people in Britain agree that human genetic research will lead to cures for disease and healthier babies, according to a survey commissioned by the Human Genetics Commission (HGC), a national advisory body in the UK. The survey of 788 members of the Government-organized 'People's Panel' also revealed that the Panel members had little or no confidence that regulation of scientific developments would be able to keep pace with current progress in the field.

With regard to the healthcare and workplace implications of genetic profiling, three quarters of those questioned said genetic tests should not be incorporated in the setting of insurance premiums, but a third felt it appropriate that health and life insurers see test results before they agree to provide cover. In the workplace, 72% of people were opposed to employers using genetic information to determine whether their staff was likely to become ill or take early retirement. However, 70% were happy for an employer to have access to the information if it was used to determine whether people might

be sensitive to substances such as chemicals.

The public consultation will continue until March 2001 with final recommendations due to go before ministers in the third quarter of 2001.

News in Brief was written by
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People

Young Scientist Prize winner: explanation for two-level immune system?

The 2000 Young Scientist Prize, awarded annually since 1995 by *Science* and Amersham Pharmacia Biotech, was given to Alka Agrawal (Stamford, CT, USA). Applicants for the \$25,000 prize are required to have recently earned their PhD and to submit a 1000-word essay based on their dissertation. The essays are judged on the quality of the research and the applicants' ability to articulate how their work contributes to the field of molecular biology.

Alka Agrawal did her PhD at Yale University (New Haven, CT, USA) under the supervision of David G. Schatz and Quinn M. Eastman, where she showed that the *RAG1* and *RAG2* genes can carry out transposition reactions in the test-tube which, if they occur *in vivo*, could be involved in DNA translocations associated with certain cancers. Agrawal further proposed that millions of years ago, a RAG transposon produced our current two-level immune system, including immunoglobulin and T-cell receptor gene segments, by splitting sequences that are then duplicated. On her discoveries, Agrawal said: 'We observed an unexpected product in our tests and, oddly enough, it turned out to be really important. It was one of those

serendipitous moments in scientific investigation when a big puzzle suddenly falls into place.'

Four regional winners for each of the four geographical regions of North America, Europe, Japan and all other countries were also awarded. These \$5000 awards went to:

- Yuki Yamaguchi (University of Tokyo, Japan) for providing insights into how HIV proliferates as viral genetic sequences elongate during transcription;
- Rafal Ciosk (University of Vienna, Austria) for inventing an assay to study cohesion proteins linking sister chromatids in a budding yeast model;
- Douglas M. Heithoff (University of California–Santa Barbara, CA, USA) for identifying the 'switch' that makes bacteria pathogenic; and
- Avraham Yaron (Hebrew University, Jerusalem, Israel) for helping to explain a crucial molecular mechanism involved in chronic inflammatory diseases and tumour cell resistance to chemotherapy.

Four professors for Biotica Technology Scientific Advisory Board

Biotica Technology (Cambridge, UK) has just appointed four professors to their Scientific Advisory Board: Eric Cundliffe, Iain Hunter, Craig Townsend and John

Vederas. The company focuses on the discovery of novel biopharmaceuticals through the targeted alteration of biosynthetic pathways producing natural products.

Cundliffe is currently Professor of Biochemistry at the University of Leicester (UK) and has worked primarily on the biochemistry and genetics of *Streptomyces* and on antibiotic resistance. His previous positions have included Director of the Leicester Biocentre until 1990. Hunter is currently Professor of Molecular Microbiology (Department of Pharmaceutical Sciences, Strathclyde Institute for Biomedical Sciences, University of Strathclyde, UK) where he is researching the genetics of industrially important microorganisms, particularly *Streptomyces*.

Townsend is Alsoph H. Corwin Professor of Chemistry in the Departments of Biology and Biophysics at the John Hopkins University (Baltimore, MA, USA). His areas of expertise include natural product biosynthesis, the enzymology and molecular biology of secondary metabolism, small-molecule–DNA interactions and rational drug design. Finally, Vederas is Professor of Organic Chemistry at the University of Alberta (Edmonton, Alberta, Canada) and is mostly interested in the formation of important biological molecules such as antimicrobial peptides, amino acid metabolites and polyketides through the use of a variety of techniques including organic synthesis, NMR and MS, isotopic techniques and natural product isolation.