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Indexed Collection of the Literature on Aneuploidy

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A literature collection was assembled and indexed by the Environmental Mutagen Information Center (EMIC), Information Center Complex, Oak Ridge National Laboratory, for use by the participants in the Workshop on Systems to Detect Induction of Aneuploidy by Environmental Mutagens. It includes over 600 references to journal articles, review articles, and abstracts on nondisjunction and aneuploidy published since 1970. References were compiled from the EMIC data base and from data bases maintained by the National Library of Medicine and the Systems Development Corporation Search Service. The emphasis in this collection, as in the conference, is on the use of nondisjunction as a screening method for environmental mutagens. Reports of the effects of environmental agents on chromosome segregation and papers which describe protocols for measuring nondisjunction or discuss the value of nondisjunction assays in comprehensive screening programs comprise the screening subset of the collection. These citations were used to compile the indices of agents, test objects, and methods. A second subset is composed of reports on the incidence of aneuploidy in human populations. Reports of individual case studies were systematically excluded from the collection. Abstracts meeting the following criteria were included: (1) the results have not been subsequently published in English; (2) they contain data or an explicit description of the results. All abstracts and review articles have been identified as such. Unless otherwise indicated, all publications are in English; translations are indicated.

Papers dealing with specific topics are referenced in the keyword index. Reports on the incidence of trisomies in certain neoplasms and on the importance of nondisjunction in the induction and proliferation of tumors are indexed under keyword cancer. No attempt was made however to include the many reports of aneuploidy in tumor cells. Other keywords refer to genetic and cytological phenomena associated with induction of aneuploidy, e.g., spindles, heterochromatin, recombination. Literature reviews and bound collections are listed in a separate index. The indices of keywords and reviews are not restricted to particular subsets but cover the entire collection. A complete author index is also provided.

Copies of the literature collection are available on request from EMIC at the address listed above.

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