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EXTRAHEPATIC DRUG METABOLISM AND CHEMICAL CARCINOGENESIS

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Proceedings of the International Meeting on Extrahepatic Drug Metabolism and Chemical Carcinogenesis held in Stockholm, Sweden, on 17-20 May, 1983

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FOREWORD

The tremendous progress which has characterized toxicological research during the last two decades has involved mainly research on hepatic systems. In depth characterization of isolated proteins, e.g., cytochrome P-450, has provided powerful tools for the elucidation of the mechanisms of action of drug-metabolizing systems and has allowed conclusions to be drawn which may also apply to extrahepatic systems. Based on this knowledge, hypotheses for metabolic activation and chemical carcinogenesis in general have been advocated which have been questioned only rarely. Epidemiological evidence indicates that more than 95% of all human cancers in the Western world are extrahepatic and that up to 80% of these are related to diet, environmental factors, and, indirectly, endogenous factors. Obviously, there is a need for more extensive research on the relationship between cancer in a specific extrahepatic organ and the generation of potential carcinogens and other relevant processes in that organ. The logical approach is thus to use our extensive knowledge of the hepatic system as a platform.

The International Meeting on Extrahepatic Drug Metabolism and Chemical Carcinogenesis held in Stockholm, 17-20 May 1983, from which the present proceedings are derived, was the first meeting which has specifically addressed the problems and approaches peculiar to extrahepatic carcinogenesis. Topics included characterization and regulation of cytochrome P-450 and other detoxication enzymes, DNA-adduct formation and repair, and model systems of extrahepatic carcinogenesis. The success of the meeting and the exceptionally good response from lecturers and other participants indicates the importance of stressing the often unique problems in extrahepatic carcinogenesis. A second meeting on similar topics is therefore planned to take place in USA in 1986.

Jan Rydström

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