



*Join us for the first hands-on workshop of its kind to be offered
in South Africa!*

PROMECC Unit, Medical Research Council, Tygerberg, South Africa
August 27-28, 2010

Harmonizing Genetic Toxicology Testing: Application of Short-Term Cytogenetic Assays

Introduction

It has become evident that there is a direct link between higher incidence of chromosomal abnormalities such as chromosomal aberrations and micronucleus and cancer. These cytogenetic assays have been standardized and validated in different systems *in vitro* and *in vivo*, and were successfully applied to elucidate the genotoxic and mutagenic potential of a series of chemicals such as environmental pollutants, cytostatic drugs, and human dietary components.

This two day course offers a wonderful opportunity to become familiar with the general scope and aims of genetic toxicology, and will offer a technical hands-on portion which will acquaint participants with two established cytogenetic assays that are applicable for both basic as well as applied science research programs.

*Participation is **FREE**, therefore this is a unique opportunity to learn important new techniques at a very low cost!*

Course organizer

The course is organized and taught by Dr. Firouz Darroudi from the Department of Toxicogenetics, Leiden University Medical Centre, Leiden, The Netherlands. He is a senior consultant to the UNESCO, World Health Organization (WHO), International Atomic Energy Agency (I.A.E.A.), and National Institution for Occupational Safety and Health (NIOSH, USA), on Biological Dosimetry, Chemical Mutagens and Occupational Exposure. We are very pleased to be able to hold this workshop at the PROMEC Unit, Medical Research Council, Tygerberg, South Africa. Transportation will be provided for participants between the congress venue and the PROMEC Unit in Tygerberg.



Dr. Firouz Darroudi

Over the last 30 years Dr. Darroudi worked in the field of chemical mutagenesis, radiation genetics, food, nutrition, role of DNA repair proteins in guarding chromosomal stability, detecting cancer causes and cancer prevention. He is involved in pioneering development and validation of different biological assays to identify in mammalian cells (*in vitro* and *in vivo*) the effects of radiation of different qualities as well as chemicals and their relationships with the cellular responses (such as cytotoxicity, chromosomal alterations, DNA repair, gene mutations) and cancer risks. Moreover, he has been involved in establishing and validating various *in vitro* assays as alternatives to use of vertebrate animals to detect genotoxic, anti- and co-genotoxic potential of human dietary components.

Topics of interest

A. Theoretical:

Participants will learn how to develop and validate biological assays to detect the genotoxic potential of physical and chemical agents, as well as how to assess the genotoxic, co- and anti-genotoxic potential of human dietary components using human HepG2 cells.

B. Practical:

Course attendees will participate in the hands-on laboratory portion and will learn cell culturing, chromosome aberration and micronucleus assays, scoring criteria, and slide analysis.

Due to space requirements participants are limited to 15, so register today!

For more information contact Dr. Beth Ann Crozier-Dodson at

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Other Sponsoring Agencies



The Global Harmonization Initiative is a nonprofit association of scientific organizations and individual scientists working together to promote harmonization of global food safety regulations and legislation. GHI's mission is to achieve consensus on the science of food regulations and legislation and to provide decision-makers with objective information to ensure the global availability of safe and wholesome food products for all consumers. **For more information, visit www.globalharmonization.net.**