

INTERNATIONAL SYMPOSIUM ON METALS AND GENETICS

Toronto, May 24-27,1994

Location and Dates:

The symposium will be held in Toronto, Canada, from 24 - 27 May, 1994. As one of the academic and cultural centers of Canada, Toronto boasts restaurants, theaters, museums, art galleries, and sights that can be counted amongst the world's finest.

Aims:

It is the aim of this conference to bring together investigators from diverse fields in order that the broad implications of the direct and indirect interactions of metals and DNA may be discussed. The conference will be organized around approximately six areas involving metals and genetics:

I. Molecular mechanisms of metal induced mutagenicity and carcinogenicity: It has been known for several years that metals such as nickel and chromium can cause cancer. The latest advances which have begun to demonstrate the underlying mechanisms will be discussed.

II. Metal induced DNA cleavage: Recent investigations have shown that synthesised metal compounds, hybrid proteins and existing metal binding proteins are able to cleave DNA. At this conference, the design of such agents, their mechanisms of action and possible applications will be discussed.

III. Genetics and Biochemistry of Metal Related Diseases: The identification of the genes for Menkes and Wilson diseases will be discussed. Advances in the understanding of the pathophysiology of these diseases as well as advances in therapies for these diseases will be examined.

IV. Zinc Finger Proteins: The structures and functions of this unique class of DNA binding proteins will be examined.

V. Metal Effects on Gene Expression: In this conference the mechanisms of metal induced gene expression will be discussed.

VI, Direct Interaction of Metals and DNA: In this area the direct binding of metals to DNA, including the mechanisms and the structural aspects of this binding will be examined.

**Further details and/or enquiries should be
forwarded to:**

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