Editorial preface

This volume is a tribute to Professor Karl Fredga, who has recently retired from the University of Uppsala, and to recognize his lifelong contribution to cytogenetics. The volume consists largely of peer-reviewed research articles written by friends and colleagues, with multiple representation from all six continents of the globe! There is also an appreciation of Karl and an anecdotal article about the discovery of the correct chromosome number in humans made in the Cancer Chromosome Laboratory in Lund where Karl was based for the first half of his career.

The research articles reflect many of Karl's interests. There are articles about chromosomal and genomic evolution, sex chromosomes and sex determination, within-species chromosomal and mitochondrial variation, and about new cytogenetic techniques. These are all areas that Karl has researched and written about. The diversity of models that come through in these articles reflects the plurality of Karl's own approach towards cytogenetics. Here there are articles on plants, insects, amphibia, birds, marsupials, horses, cattle, carnivores, lagomorphs, rodents, bats, shrews, primates and humans.

This volume is being produced in conjunction with a one-day scientific meeting in honor of Karl on 7 September 2002 to be held in Paris. The talks to be given at that meeting are listed below:

T. Ashley	The "Me Too" X chromosome
B.O. Bengtsson	Chromosome evolution: organism fitness and genetic conflicts
J. Britton-Davidian	Monobrachial homology and hybrid fitness in house mice
J.A.M. Graves	Sex chromosomes and sex determination in weird mammals
M. Jaarola	Species-wide phylogeographies of voles (<i>Microtus</i>) inferred from mitochondrial and Y chromosome DNA sequences
W. Just	Sex chromosomes and sex determination in mole voles
U. Mittwoch	Sex determination: a treasure house of unorthodox data
W. Schempp	Fiber-FISH contig spanning the non-recombining region of the human Y chromosome
M. Schmid	Sex chromosomes in birds: evolution, structure and function
J.B. Searle	Using genetic markers to track human mediated colonisations of small mammals
V.T. Volobouev	African rodent species diversity and patterns of geographical distribution as inferred from 50 years of chromosomal studies

Finally, my thanks. I would like to thank most warmly all authors and referees for their enthusiasm towards contributing to this volume in honor of Karl, for all their hard work and for keeping so well to time. I am also extremely grateful for all the assistance and support provided to me by the editorial team of Cytogenetic and Genome Research and most particularly the invaluable guidance and help provided by Michael Schmid. Finally, I would like to thank Terry Ashley, Maarit Jaarola, Ross Jones, York Biology Department Stores and York Biology Department Photographic Unit for photographic and computer images and technical help.

J.B. Searle (volume editor)