

Elucidates the connection between genetic instability, cancer and premature aging

# Fanconi Anemia

## A Paradigmatic Disease for the Understanding of Cancer and Aging

Editors

**Detlev Schindler  
Holger Hoehn**



Fanconi anemia (FA) is a rare genetic disease discovered 80 years ago by Guido Fanconi, an eminent Swiss pediatrician. It is characterized by short stature, skeletal anomalies, increased incidence of solid tumors and leukemias, bone marrow failure and cellular sensitivity to DNA damaging agents.

Following a historical account, exemplary case reports and the current status of FA genes and their mutations, this volume discusses neoplasia in FA as well as current approaches to pre- and postnatal diagnosis. Further topics include revertant mosaicism as a kind of 'natural gene therapy' and hematopoietic stem cell transplantation as the only curative approach in FA. The final chapters investigate evolutionary aspects of the FA genes with special emphasis on the avian genome and the involvement of FA genes in recombinational types of DNA repair.

Physicians and researchers in the fields of pediatrics, hematology, cancer, genetics, DNA repair and aging will benefit from understanding this disease, which illustrates the complex network of genomic maintenance systems that protect us from cancer and premature aging.

*Fields of Interest: Genetics, Hematology, Pediatrics, Cell Biology, Human Genetics, Leukemia, Molecular Biology, Oncology, Gerontology*

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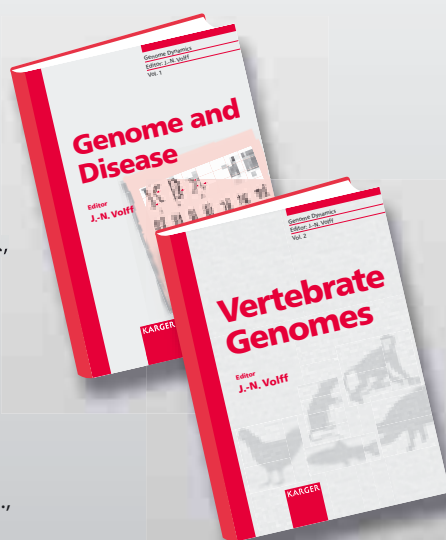
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