
CHROMOSOMES TODAY

VOLUME 8

EDITED BY
M.D. BENNETT A. GROPP
& U. WOLF

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Proceedings of the Eighth International
Chromosome Conference held in
Lübeck, West Germany, 21–24 September 1983

Editors

M. D. BENNETT	<i>Plant Breeding Institute, Cambridge</i>
A. GROPP	<i>Medizinische Hochschule, Lübeck</i>
U. WOLF	<i>Universität Freiberg, i.Br.</i>

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In Memoriam Alfred Gropp



15 April 1924 – 22 October 1983

vi In memoriam *Alfred Gropp*

September 21 to 24 in Lübeck were pleasant days with a taste of still lingering summer mixed with a hint of autumn to come. The 8th International Chromosome Conference, held in this old Hanseatic city still preserving the medieval charm and in the area made familiar to us all by various writings of Thomas Mann, was a great success. The congenial atmosphere which permeated every facet of this gathering was a reflection of the organizer's personality. I recall the first impression of Alfred Gropp conveyed to me by Eva Eicher of Jackson Laboratory at another meeting "Saint Nicholas in person". At the congress dinner held at the great hall of the Schiffer-Gesellschaft, where many a generation of old sea dogs must have exchanged endless tales of the Baltic Sea, Alfred, accompanied by his wife, Dorothea, appeared to be in the prime of his life, vibrant and cherubic. How little did we know that he was to leave us forever exactly 28 days hence. Such is the frailty of life in this mortal world that afflicts us all. The 8th International Chromosome Conference that honored the founder, Professor C. D. Darlington, was thus to become the last milestone of Professor Alfred Gropp's career as well.

Alfred in his manner, taste and broad educational background was a gentleman of the old school in the most complimentary sense; his appreciation of this life extending to good art, drink and food. Our friendship started in 1964 when he did a stint at the City of Hope. Our salaries were meager then, and I recall two automobiles he had purchased; one for \$75 and the other for \$1,000. The cheaper one lasted for the entire length of his stay, while he had to abandon his more expensive automobile upon his first excursion into the Mojave desert. We worked together on fetal development of gonads, especially the ovary. As a medical man Alfred was a very distinguished pathologist and was regarded as the authority in perinatal pathology. But most of us will remember him as a very accomplished biologist in basic research. Not many of the full-time biologists with no heavy extra-curricular duty can claim two major accomplishments in their lifetime as could Alfred: 1) The discovery, together with Karl Fredga, of fertile XY females among the wood lemming, Myopus schisticolor. 2) Discovery of the Tobacco mouse, Mus musculus poschiavinus, with 7 pairs of metacentric autosomes and the subsequent introduction

of each metacentric chromosome separately into the inbred strains of laboratory mice. This enabled him to construct all sorts of monosomic and trisomic embryos at will. I feel especially sad because Alfred and his colleagues had just embarked upon a very important series of experiments; e.g. what happens if a mouse starts its life with the hemopoietic system entirely comprised of trisomy 15 cells? It should be recalled that trisomy 15 is the universal characteristic of leukemic T-lymphocytes of the mouse and that the mouse chromosome 15 carries c-myc oncogene. Alfred Gropp was indeed a great man. His image will live forever in the minds of those who loved him and respected his accomplishments.

Susumu Ohno

Alfred Gropp was born on April 15, 1924 in Mannheim as the son of Alfred Gropp sen., the later Lord Mayor of Bad Dürkheim and his wife Martha. He grew up in Bad Dürkheim, a small town surrounded by vineyards of the Palatine in the Southwest of Germany. He finished school in 1942, but was not allowed to go to university because his mother was Jewish. He became a tax-inspector-trainee for a while, until he was drafted into a working camp in France. He began his university studies only after the end of the Second World War in 1945. Since the Heidelberg medical faculty was the first to enter into teaching activities after the war, Alfred Gropp decided to enrol for medicine despite a great general interest in philosophy, language and natural sciences. He nevertheless took the opportunity to attend lectures of Karl Jaspers, Felix v. Eckardt and Gustav Radbruch at the Heidelberg university, and even wrote a paper on Georg-Willhelm-Friedrich Hegel. In 1949 he married his wife Dorothea while they were both still students. One year later Alfred Gropp passed his final medical examinations and finished his thesis (Dissertation) on "Mitose des *Tritus palmatus* Keims und ihre Beeinflussung durch Colchicin". During his postdoctoral training he worked in the Department of Anatomy and the Department of Experimental Cancer Research, chaired by H. Lettré. Here he first became acquainted with tissue culture techniques, in collaboration with Mrs Lettré, who was one of the pioneers in this field, and here he experienced his first contacts

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with the international science community. In 1953 he entered a one-year research fellowship granted by the WHO at the "Institut de Recherches sur le Cancer Gustave-Roussy", Villejuif/Seine (Prof. Dr. Charles Oberling).

In the early fifties it was extremely difficult to find open positions for medical doctors. For Alfred Gropp it was a good chance, when Herwig Hamperl, head of the Institute of Pathology of the University of Bonn, became interested in new trends in Cancer research. Alfred Gropp joined him in 1954 and started his special training in Pathology. In 1961 he finished his second thesis (Habilitation) on "Untersuchungen zur Funktion der Plasmamembran und zur Morphologie der aktiven Stoffaufnahme". He became associate professor in 1966, full professor and head of the laboratory for cytopathology and cytogenetics at the Institute of Pathology in Bonn in 1967, head of the Department of Paediatric Pathology at the University of Bonn in 1969 and finally took the chair of Pathology at the "Medizinische Hochschule Lübeck" in 1972.

Besides his fundamental interest in clinical and experimental pathology, his main scientific effort was concentrated on the establishment of developmental pathology as an important and acknowledged speciality within the field of General Pathology. He was one of the first to introduce clinical cytogenetics into diagnosis and research. He was a promotor of the introduction of cytogenetics into oncology, and was deeply engaged in studies on chromosomal changes in the course of evolution. Discovering the tobacco mouse in 1968 and other mouse subspecies as natural carriers of Robertsonian translocations and as an experimental model for the induction of chromosomal trisomies, Alfred Gropp set new dimensions for cytogenetics, molecular genetics, gene localization, developmental biology and teratology. According to his understanding of a collaborative scientific research, he opened his mouse system to everyone who wanted to participate.

Another field of interest comprised reproductive injuries and disturbances of sexual differentiation and fertility on the morphological as also on the chromosomal level. The detection of the fertile female XY-wood lemming together with Karl Fredga greatly contributed to the knowledge of genetic causative and regulatory

mechanisms in reproductive failure, and represented another milestone in Alfred Gropp's scientific life. In his last years he was occupied with studies on the meiotic pairing behaviour of abnormal chromosomes in mouse and man. The finding of oocyte differentiation within testicular tubules of true hermaphroditic mice was virtually his last observation a few weeks before he died.

In the course of his academic life Alfred Gropp had more and more concentrated his efforts on basic genetic problems. The great success he had achieved in this field became obvious when, in 1977, he was offered the chair of Human Genetics at the University of Amsterdam.

Alfred Gropp was not only a scientist but also an excellent university teacher, a man of principles and of tolerance. He always demanded more of himself than of others. His critiques were true and fair but never caustic. Thus he was particularly well qualified to be a coeditor and referee for many journals, and a scientific expert consulting for the Deutsche Forschungsgemeinschaft and other research foundations inside and outside of Germany. His hospitality was extremely generous at home as also at the Institute, where he took care of many "Humboldt-Stipendiaten" or other colleagues from abroad. He was a member of numerous scientific organizations, often presiding at conferences and organizing symposia. The 8th International Chromosome Conference on Sept. 21-24 was the last highlight in his academic career.

Alfred Gropp left behind three sons and his wife Dorothea, who has supported him in every respect and participated in his scientific life. He also left behind a great many friends. All who knew him and who worked with him will honour his memory.

Helga Rehder

Eberhard Schwinger

Conference members

- Abel G. Institut für Botanik und Pharmaz. Biologie, Universität
Erlangen, Schlossgarten 4, D-8520 Erlangen, West Germany.
- Adler I.D. Institut für Genetik der GSF, Ingoldstaetter
Landstrasse 1, 8042 Neuherberg, West Germany.
- Adolph S. Abteilung Klinisch Genetik, Universität Ulm, Oberer
Eselberg M25, D-7900 Ulm/Donau, West Germany.
- Albanese R. Safety of Medicines Department, ICI Pharmaceutical
Division, Mereside, Alderley Park, Macclesfield, Cheshire
SK10 4TG, UK.
- Ali S. Department of Zoology, Aligarh Muslim University, Aligarh,
Uttar Pradesh 202001, India.
- Alitalo T.S. Harmotie 4E31, University of Helsinki, SF-01200
Vantaa 20, Finland.
- Allen J. Genetic Toxicology Division, US Environmental Protection
Agency, Research Triangle Park, North Carolina 27511, USA.
- Alvarez M.C. Departamento de Genetica, Facultad de Ciencias,
Universidad de Malaga, Malaga, Spain.
- Antoine J.L. Institut de Progenese, 15 Rue de l'Ecole de
Medecine, F-75270 Paris Cedex 06, France.
- Arnason U. Institute of Genetics, University of Lund, Sölvegatan
29, S223 62 Lund, Sweden.
- Arndt-Jovin D.J. Abteilung Mol. Biologie, Max-Planck-Institut für
Biophys. Chemie, Postfach 968, D-3400 Göttingen, West Germany.
- Ashley T. Department of Zoology, University of Tennessee,
Knoxville, Tennessee 37996, USA.
- Avivi L. Department of Human Genetics, Sackler School of
Medicine, Tel-Aviv University, Ramat-Aviv, 69978 Israel.
- Baeza F. Departamento de Genetica, Facultad de Biologie,
Universidad Complutense, Madrid 3, Spain.
- Bakker E. Department of Human Genetics, Sylvius Laboratoria,
Instituut voor Anthropogenetica, Waasenaarseweg 72, 2333 AL
Leiden, The Netherlands.
- Ballesta F. Servicio de Genetica, Hospital Clinico, Plaza Tetuan
38, , Barcelona 10, Spain.
- Barigozzi C. Istituto di Genetica, Universita di Milano, Via
Celoria 10, 20122 Milan, Italy.
- Bartram C.R. Department of Cell Biology and Genetics, Erasmus
University, PO Box 1738, 3000 DR Rotterdam, The Netherlands.
- Beerman F. Institut für Humangenetik, Universität Göttingen,
Nikolausberger Weg 5A, D-3400 Göttingen, West Germany.
- Beerman W. Max-Plancke-Institut für Biologie, Spemannstrasse 34,
D-7400 Tübingen, West Germany.
- Bennett M.D. Plant Breeding Institute, Maris Lane, Trumpington,
Cambridge CB2 2LQ, UK.
- van den Berghe H. Division of Human Genetics, Minderbroederstr.
12, B-3000 Leuven, Belgium.
- Beverstock G.C. Department of Human Genetics, Sylvius Laboratoria,
Instituut voor Antropogenetica, Waasenaarseweg 72, 2333 AL
Leiden, The Netherlands.
- Blin N. Deutsches Krebsforschungszentrum, Institut für
Experimentelle Pathologie, Im Neuenheimer Feld 280, D-6900
Heidelberg, West Germany.
- Bobrow M. Paediatric Research Unit, Guy's Hospital Medical
School, Guy's Tower, London Bridge, London SE1 9RT, UK.
- de Boer P. Department of Genetics, Agricultural University, 53
General Foulkesweg, 6703 BM Wageningen, The Netherlands.

xvi *Conference members*

- Bolund L. Institute of Human Genetics, Bartholin Building,
University of Aarhus, DK-8000 Aarhus C, Denmark.
- van Brink J.M. Department of Animal Cytogenetics, Padualaan 8,
PO Box 80.061, 3508 TB Utrecht, The Netherlands.
- Bruederlein S. Institut für Humangenetik und Anthropologie,
Universität Erlangen, Bismarckstrasse 10, D-8520 Erlangen,
West Germany.
- Bühler E.M. Universitätskinderklinik, Genetisches Institut,
CH-4000 Basel 5, Switzerland.
- Bullerdiel J. Humangenetisches Laboratorium der Universität
Bremen, Leobenerstrasse, D-2800 Bremen 33, West Germany.
- Burt D.W. University of Leicester/ICI Joint Laboratories,
Adrian Building, University Road, Leicester LE1 7RH, UK.
- van Buul P.P.W. Department of Radiation Genetics and Chemistry,
Sylvius Laboratoria, Instituut voor Anthropogenetica,
Waasenaarseweg 72, 2333 AL Leiden, The Netherlands.
- Buys C.H.C.M. Department of Human Genetics, State University of
Groningen, Antonius Deusinglaan 4, 9713 AW Groningen, The
Netherlands.
- Capanna E. Dipartimento di Biologia Animale, Università di Roma,
Via Alfonso Borelli 50, 00161 Rome, Italy.
- de Capoa A. Istituto di Genetica, Università di Roma, Piazzale
Aldo Moro 7, 00185 Rome, Italy.
- Cardoso H. Div. Citogenetica, Instituto de Investigaciones
Biologicas Clemente Estable, PO Box 16012, Montevideo,
Uruguay.
- Carpenter A.T.C. Department of Biology, University of California
B-022, San Diego, La Jolla, California 92093, USA.
- Chandley A.C. MRC Clinical and Population Cytogenetics Unit,
Western General Hospital, Crewe Road, Edinburgh EH4 2XU, UK.
- de la Chapelle A. Department of Medical Genetics, University of
Helsinki, Haartmaninkatu 3, SF-00290 Helsinki 29, Finland.
- Chrz R. II Medizinische Klinik, U. Nemocnice 1, 128 21 Prague,
Czechoslovakia.
- Clare M.G. Shell Toxicology Laboratories, Shell Res. Ltd.,
Sittingbourne, Kent ME9 8AG, UK.
- Claussen C.P. Institut für Pathologie, Medizinische Hochschule
Lübeck, Ratzeburger Allee 160, D-2400 Lübeck 1, West Germany.
- Cleve H. Institut für Anthropologie und Humangenetik, Universität
München, Richard-Wagner-Strasse 10/1, D-8000 München 2,
West Germany.
- Cooper D. Institut für Humangenetik der Universität Göttingen,
Nikolausberger Weg 5A, D-3400 Göttingen, West Germany.
- Couturier J. Institut de Progenese, 15 Rue de l'Ecole de
Medecine, F-75270 Paris Cedex 06, France.
- Creau-Goldberg N. Hopital Necker-Enfants Malades, 149 Rue de
Sevres, 75730 Paris Cedex 15, France.
- Cremer T. Institut für Anthropologie und Humangenetik, Im
Neuenheimer Feld 328, D-6900 Heidelberg, West Germany.
- Dahlloef B. Department of Genetics, University of Göteborg,
Stigbergsgliden 14, S 414 63 Göteborg, Sweden.
- Danford N.D. Department of Genetics, University College of
Swansea, Singleton Park, Swansea SA2 8PP, UK.
- Debiec-Rychter M. Lab. Genetics, Institute of Endocrinology,
Medical Academy of Lodz, Dr.Sterling St. 3, 91425 Lodz,
Poland.

- Delhanty J.D.A. The Galton Laboratory, Wolfson House, 4 Stephenson Way, London NW1 2HE, UK.
- Dietrich A.J.J. Institute for Human Genetics, Sarphatistraat 217, 1018 BX Amsterdam, The Netherlands.
- Dover G. Department of Genetics, University of Cambridge, Downing Street, Cambridge CB2 3EH, UK.
- Dreiss M. Chromosomenlaboratorium, Herrenwiesenweg 6, D-7300 Esslingen/N, West Germany.
- Dresser M.E. Department of Anatomy, Box 3011, Duke University Medical Center, Durham, North Carolina 27710, USA.
- Dutrillaux B. Institut de Progenese, 15 Rue de l'Ecole de Medecine, F-75270 Paris Cedex 06, France.
- Dyban A.P. Department of Embryology, Institute for Experimental Medicine, Academy of Medical Sciences, Kirovsky 69/71, Leningrad, 197022 USSR.
- Edström J.E. Europaeisches Laboratorium für Molekularbiologie, Meyerhofstrasse 1, D-6900 Heidelberg, West Germany.
- Egozcue J. Department of Cell Biology, Instituto de Biologia Fundamental, Universidad Autonoma de Barcelona, Avenida San Antonio M. Claret 171, Barcelona 25, Spain.
- Eichenlaub U. Lehrstuhl für Zellmorphologie GB ND 05, Ruhr-Universität-Bochum, Postfach 10 21 48, D-4630 Bochum 1, West Germany.
- Evans E.P. Sir William Dunn School of Pathology, University of Oxford, South Parks Road, Oxford OX1 3RE, UK.
- Evans G.M. Department of Agricultural Botany, University College of Wales, Penglais, Aberystwyth, Dyfed SY23 3DD, UK.
- Faed M.J.W. Cytogenetics Laboratory, University of Dundee, Ninewells Hospital, Dundee DD1 9SY, UK.
- Feldman M. Department of Plant Genetics, Weizmann Institute of Science, Rehovoth, 76100 Israel.
- Ferraro M. Istituto di Genetica, Università di Roma, Piazzale Aldo Moro 7, 00185 Rome, Italy.
- Fonatsch C. Institut für Humangenetik, Medizinisches Hochschule Lübeck, Ratzeburger Allee 160, D-2400 Lübeck 1, West Germany.
- Forabosco A. Cattedra di Istologia et Embriologia Generale, Istituto di Anatomia Umana Normale, Università di Modena, Via Berengario 16, 41100 Modena, Italy.
- Ford C.E. 156 Oxford Road, Abingdon, Oxon OX14 2AF, UK.
- Ford J.H. Cytogenetics Department, The Queen Elizabeth Hospital, Woodville, 5011 South Australia.
- Forejt J. Institute of Molecular Genetics, Czechoslovak Academy of Sciences, Budejovicka 1083, 14220 Prague 4, Czechoslovakia.
- Fox D.P. Department of Genetics, University of Aberdeen, 2 Tilly Drone Avenue, Aberdeen AB9 2TN, UK.
- Fracaro M. Istituto di Biologia Generale, Università di Pavia, Via Forlanini 14, 27500 Pavia, Italy.
- Franz T. H.-Pette-Institut, UKE Hamburg, Martinistrasse 52, D-2000 Hamburg 20, West Germany.
- Fredga K. Department of Genetics, University of Uppsala, Box 7003, S-750 07 Uppsala, Sweden.
- Friebe B. Institut für Angewandte Genetik, Freie Universität Berlin (WE6) (FB23), Albrecht-Thaer-Weg 6, D1000 Berlin 33, West Germany.
- Friedlander M. Department of Biology, Ben Gurion University of The Negev, Beer Sheva, PO Box 653, Israel.

xviii *Conference members*

- Friedrich U. Institute of Human Genetics, Bartholin Building,
University of Aarhus, DK-8000 Aarhus C, Denmark.
- Froster-Iskenius U. Institut für Humangenetik, Medizinische
Hochschule Lübeck, Ratzeburger Allee 160, D-2400 Lübeck 1,
West Germany.
- Fundele R. Institut für Pathologie, Medizinische Hochschule
Lübeck, Ratzeburger Allee 160, D-2400 Lübeck 1, West Germany.
- Gadhia P. Abteilung für Humangenetik und Humanbiologie,
Universität Kaiserslautern, Postfach 3049, D-6750
Kaiserslautern, West Germany.
- Gaenge M. Institut für Humangenetik, Universität Berlin,
Heubnerweg 6, D-1000 Berlin 19, West Germany.
- Gamperl R. Institut für Medizinische Biologie und Humangenetik,
Karl-Franzens-Universität, Harrachgasse 21, A-8010 Graz,
Austria.
- Gebhart E. Institut für Humangenetik und Anthropologie,
Universität Erlangen, Bismarckstrasse 10, D-8520 Erlangen,
West Germany.
- Geraedts J.P.M. Department of Genetics and Cell Biology, State
University of Limburg, PO Box 616, 6200 MD Maastricht, The
Netherlands.
- Ghidoni A. Dipartimento di Biologia, Sezione Genet. e Microbiol.,
Università di Milano, Via Celoria 26, 20122 Milan, Italy.
- Glaetzer, K.H. Institut für Genetik, Gebäude 26.02, Universität
Düsseldorf, Universitätsstrasse 1, D-4000 Düsseldorf, West
Germany.
- Goday C. Dipartimento di Genetica e Biologia Molecolare, Istituto
di Genetica, Università di Roma, Città Universitaria, 00185
Rome, Italy.
- Goedde-Salz E. Abteilung Humangenetik, Christian-Albrechts-
Universität, Schwanenweg 24, D-2300 Kiel, West Germany.
- Goetz P. Department of Human Genetics, U. Uvalu 84, 15112 Prague
5, Czechoslovakia.
- Goyanes V.J. Section of Genetics, Service of Pathology, Juan
Canalejo Hospital, La Coruna, Spain.
- Graeven U. Abteilung für Onkologie und Haematologie, UKE Hamburg,
Martinistrasse 52, D-2000 Hamburg 20, West Germany.
- Granzow C. Institut für Zell- und Tumorbologie, Deutsches
Krebsforschungszentrum, Im Neuenheimer Feld 280, D-6900
Heidelberg, West Germany.
- Greenblatt I.M. Department of Zoology, University of Tennessee,
Knoxville, Tennessee 37996, USA.
- Greilhuber J. Botanisches Institut der Universität Wien, Rennweg
14, A-1030 Vienna, Austria.
- Gripenberg U. Department of Genetics, University of Helsinki,
Rautatiekatu 13, SF-00100 Helsinki 10, Finland.
- Gropp A. Institut für Pathologie, Medizinische Hochschule Lübeck,
Ratzeburger Allee 160, D-2400 Lübeck 1, West Germany.
- de Grouchy J. Laboratoire de Cytogenétique Humaine et Comparée/
U173 INSERM, Hôpital Necker-Enfants Malades, 149 Rue de
Sevres, F-75730 Paris Cedex 15, France.
- Guichaoua M. Department of Cytogenetics, Faculty of Medicine,
Boulevard P. Dramard, F-13385 Marseille Cedex 3, France.
- Haaf T. Institut für Humangenetik, Koellikerstrasse 2, D-8700
Würzburg, West Germany.
- Haapala A.K. Department of Pathology, University of Oulu, SF-90220
Oulu 22, Finland.

- Haapala O. Institute of Biomedicine, University of Turku,
Koskenniemenkatu 4, SF-20500 Turku, Finland.
- Hagemeyer-Hausman A. Department of Cell Biology and Genetics,
Erasmus University, PO Box 1738, 3000 DR Rotterdam, The
Netherlands.
- Hager H.D. Institut für Anthropologie und Humangenetik,
Universität Heidelberg, Im Neuenheimer Feld 328, D-6900
Heidelberg, West Germany.
- Hameister H. Abteilung für Klinische Genetik, Universität Ulm,
Oberer Eselberg M25, D-7900 Ulm/Donau, West Germany.
- Hamers A.J.H. Department of Genetics and Cell Biology, State
University of Limburg, PO Box 616, 6200 MD Maastricht, The
Netherlands.
- Hansen S. Evangelisches Krankenhaus Oberhausen, Virchowstrasse
20, D-4200 Oberhausen 1, West Germany.
- Hansmann I. Institut für Humangenetik, Universität Göttingen,
Nikolausberger Weg 5A, D-3400 Göttingen, West Germany.
- Harrison C.J. Department of Cell Biology, Paterson Laboratories,
The Christie Hospital, Manchester M20 9BX, UK.
- Hartley-Asp B. AB Leo Pharmacology Department, Box 941, S 251 09,
Helsingborg, Sweden.
- Hartung M. Laboratoire d'Histologie et Embryologie II, Faculté
de Médecine, Boulevard Jean Moulin 27, F-13385 Marseille
Cedex 4, France.
- Hauschteck-Jungen E. Zoologisches Institut der Universität
Zürich, Winterthurerstrasse 190, Zürich, Switzerland.
- zur Hausen H. Vorsitzender d. Stiftungs Vorstandes der Deutsches
Krebsforschungszentrum, Im Neuenheimer Feld 280, D-6900
Heidelberg, West Germany.
- van Heemert C. Insect Genetics Unit, Foundation ITAL, PO Box 48,
6700 AA Wageningen, The Netherlands.
- Heilbronner H. Abteilung für Klinische Genetik, Institut für
Anthropologie und Humangenetik, Wilhelmstrasse 27, D-7400
Tübingen, West Germany.
- van Hemel I.O. Department of Clinical Genetics, Erasmus
University, PO Box 1738, 3000 DR Rotterdam, The Netherlands.
- Heneen W.K. Department of Crop Genetics and Breeding, Swedish
University of Agricultural Sciences, S-268 00 Svalöv,
Sweden.
- Hens L. Medische Genetika, Instituut voor Morfologie, Vrije
Universiteit Brussel, Laarbeeklaan 103, 1090 Brussel,
Belgium.
- Herbst E.W. Institut für Pathologie, Medizinische Hochschule
Lübeck, Ratzeburger Allee 160, D-2400 Lübeck 1, West Germany.
- Heslop-Harrison J.S. Plant Breeding Institute, Maris Lane,
Trumpington, Cambridge CB2 2LQ, UK.
- Hess O. Institut für Genetik, Gebäude 26.02, Universität
Düsseldorf, Universitätsstrasse 1, D-4000 Düsseldorf, West
Germany.
- Heyting C. Institute for Human Genetics, Sarphatistraat 217,
1018 BX Amsterdam, The Netherlands.
- Hilwig I. Johannesallee 10, D-6230 Frankfurt-Hoechst, West
Germany.
- Hirth L. Institut für Humangenetik, Butenfeld 32, D-2000
Hamburg 54, West Germany.
- Hoeglund E.M. Institute of Genetics, University of Lund,
Sölvegatan 29, S 223 62 Lund, Sweden.

xx Conference members

- Hoehn H. Institut für Humangenetik der Universität,
Koellikerstrasse 2, D-8700 Würzburg, West Germany.
- Hofker M. Department of Human Genetics, Sylvius Laboratoria,
Instituut voor Anthropogenetica, Waasenaarseweg 72, 2333 AL
Leiden, The Netherlands.
- Holm P. Department of Physiology, Carlsberg Laboratory, 10 Gamle
Carlsberg Vej, DK-2500 Copenhagen Valby, Denmark.
- Holmquist G. Hughes Institute at Baylor College of Medicine,
Houston, Texas 77030, USA.
- Holzner J.H. Institut für Pathologische Anatomie, Spitalgasse 4A,
A-1090 Wien, Austria.
- Hoo J.J. Cytogenetics Laboratory, Kinsmen Paediatric Research
Centre, Alberta Children's Hospital, 1820 Richmond Road SW,
Calgary, Alberta T2T 5C7, Canada.
- Horner H.A. Department of Zoology, University of Leicester,
Adrian Building, University Road, Leicester LE1 7RH, UK.
- Hoyer-Fender S. III Zoologisches Institut für Entwicklungsbiologie
der Universität Göttingen, Berlinerstrasse 28, D-3400
Göttingen, West Germany.
- Hozier J.C. Medical Genetics Laboratory, Florida Institute of
Technology, Melbourne, Florida 32901, USA.
- Hummeler E. Institut für Humangenetik, Universität Göttingen,
Nikolausberger Weg 5A, D-3400 Göttingen, West Germany.
- Hustinx T.W.J. Division of Cytogenetics, Department of Human
Genetics, University of Nijmegen, Philips van Leydenlaan 25,
PO Box 9202, 6500 HB Nijmegen, The Netherlands.
- Hutter K.J. Institut für Experimentelle Pathologie der Deutsches
Krebsforschungszentrum, Im Neuenheimer Feld 280, D-6900
Heidelberg, West Germany.
- Israelewski N. Lehrstuhl für Genetik der Ruhr-Universität Bochum,
Postfach 10 21 48, D-4630 Bochum 1, West Germany.
- Issinger O.G. Institut für Humangenetik, Universität des
Saarlandes, Universitäts-Kliniken Bau 68, D-6650 Homburg/
Saar, West Germany.
- Jakobsson A.H. Department of Genetics, University of Göteborg,
Stigbergsliden 14, S-414 63 Göteborg, Sweden.
- Jaworska H.J. Institute of Molecular Cytogenetics, University of
Lund, Tornavägen 13, S-223 63 Lund, Sweden.
- Jeppesen P.G.N. MRC Clinical and Population Cytogenetics Unit,
Western General Hospital, Crewe Road, Edinburgh EH4 2XU, UK.
- Johannisson R. Institut für Pathologie, Medizinische Hochschule
Lübeck, Ratzeburger Allee 160, D-2400 Lübeck 1, West Germany.
- Johansen R. Zoologisches Institut der Universität Zürich,
Winterthurerstrasse 190, Zürich, Switzerland.
- Jones K. Cytogenetics Department, Jodrell Laboratory, Royal
Botanic Garden, Kew, Richmond, Surrey TW9 3DS, UK.
- Jones K.W. Institute of Animal Genetics, Department of Genetics,
University of Edinburgh, King's Buildings, West Mains Road,
Edinburgh EH9 3JN, UK.
- Kaiser P. Institut für Humangenetik und Genetik Poliklinik der
Philipps-Universität, Bahnhofstrasse 7A, D-3550 Marburg
(Lahn), West Germany.
- Kerem B. Department of Genetics, Hebrew University of Jerusalem,
Givat Ram, Jerusalem 91904, Israel.
- Klein G. Inst. f. Tumoriologi, Karolinska Institutet, Box 60400,
S-104 01 Stockholm 60, Sweden.

- Kniewald A. Institut für Humangenetik und Anthropologie,
Universität Erlangen, Bismarckstrasse 10, D-8520 Erlangen,
West Germany.
- Kopun M. Institut für Zell- und Tumorbologie der Deutsches
Krebsforschungszentrum, Im Neuenheimer Feld 280, D-6900
Heidelberg, West Germany.
- Kottusch-Geiseler V. Ulricistrasse 42, D-1000 Berlin 39, West
Germany.
- Kristoffersson U. Department of Clinical Genetics, University
Hospital, S-221 85 Lund, Sweden.
- Kubbies M. Institut für Humangenetik, Koellikerstrasse 2, D-8700
Würzburg, West Germany.
- Kunz W. Institut für Genetik, Gebäude 26.02, Universität
Düsseldorf, Universitätsstrasse 1, D-4000 Düsseldorf, West
Germany.
- Lacadena J.R. Departamento de Genetica, Facultad de Biologia,
Universidad Complutense, Madrid 3, Spain.
- Langer G. Institut für Experimentelle Pathologie der Deutsches
Krebsforschungszentrum, Im Neuenheimer Feld 280, D-6900
Heidelberg, West Germany.
- Lasne C.F. Institut de Recherches Scientifiques sur le Cancer,
BP 8, F-94802 Villejuif Cedex, France.
- Latt S.A. Division of Genetics/Mental Retardation Center,
Department of Pediatrics, The Children's Hospital Medical
Center, 300 Longwood Avenue, Boston, Massachusetts 02115,
USA.
- Lawler S. Department of Cytogenetics and Immunology, Institute
of Cancer Research, Royal Marsden Hospital, Fulham Road,
London SW3 6JJ, UK.
- Lecher P.E. Laboratoire de Cytogenetique, UER Sciences,
Universite de Clermont-Ferrand, BP 45, F-63170 Aubiere,
France.
- Lelley T. Institut für Pflanzenbau und Pflanzenzüchtung,
Universität Göttingen, Von-Siebold-Strasse 8, D-3400
Göttingen, West Germany.
- Lemeunier F. Laboratoire de Biologie et Genetique Evolutive
CNRS 91, F-91190 Gif-sur-Yvette, France.
- Levan G. Department of Genetics, University of Göteborg,
Stigbergsliden 14, S-414 63 Göteborg, Sweden.
- Lin C.C. Department of Cytogenetics, University of Calgary,
Health Sciences Centre 2203, 3330 Hospital Drive NW, Calgary,
Alberta T2N 4N1, Canada.
- Linde-Laursen I. Agricultural Research Department, Risø
National Laboratory, Postfach 49, DK-4000 Roskilde, Denmark.
- Linnert G. Institut für Angewandte Genetik, Freie Universität
Berlin (WE6) (FB23), Albrecht-Thaer-Weg 6, D-1000 Berlin 33,
West Germany.
- Loidl J. Institut für Humangenetik und Anthropologie, Universität
Erlangen, Bismarckstrasse 10, D-8520 Erlangen, West
Germany.
- Lubs H.A. University of Miami School of Medicine, 1510 Granada
Boulevard, Coral Gables, Florida 33134, USA.
- Luciani J.M. Laboratoire d'Histologie et Embryologie II, Faculte
de Medecine, Boulevard Jean Moulin 27, F-13385 Marseille
Cedex 4, France.
- MacGregor H.C. Department of Zoology, University of Leicester,
Adrian Building, University Road, Leicester LE1 7RH, UK.

xxii *Conference members*

- Madan K. Antropogenetisch Instituut, Vrije Universiteit van Amsterdam, van der Boechorstraat 7, 1081 BT Amsterdam, The Netherlands.
- Magenis E. Cytogenetics Laboratory, CDRC 2279, Oregon Health Sciences University, 707 SW Gaines Road, Portland, Oregon 97201, USA.
- Malallah G. Department of Genetics, University College of Swansea, Singleton Park, Swansea SA2 8PP, UK.
- Marcucci L. Department of Human Biopathology, University of Rome, Policlinico Umberto, 00161 Rome, Italy.
- Martinsson T. Department of Genetics, University of Göteborg, Stigbergsliden 14, S-414 63 Göteborg, Sweden.
- Mathew S. Institut für Humangenetik und Anthropologie der Universität, Albertstrasse 11, D-7800 Freiburg/i.Br., West Germany.
- Mattila T. Viljelijaentie 4-6B59, University of Helsinki, SF-00410 Helsinki 41, Finland.
- del Mazo Martinez J. Consejo Super. de Investigaciones Cientificas, Instituto de Genetica, Velazquez 144, Madrid 6, Spain.
- McDermott A. South West Regional Cytogenetics Centre, Southmead Hospital, Westbury-on-Trym, Bristol BS10 5NB, UK.
- Mehdipour P. Unit of Human Genetics and Medical Anthropology, Tehran University, PO Box 1310, Tehran, Iran.
- Merani M.S. IMBICE Anatomia Comparata di Roma, Las Heras 3892 (Depto. 1), 1425 Buenos Aires, Argentina.
- Mezzanotte R. Istituto di Biologia, Università di Cagliari, Via Ospedale 121, Cagliari, Sardinia.
- Michalova K. III Medizinische Klinik, Charles University, U. Nemocnice 1, 128 21 Prague, Czechoslovakia.
- Midro A.T. Department of Clinical Genetics, Institute of Obstetrics and Gynaecology, Medical Academy, ul. Warszawska 15, 15062 Bialystok, Poland.
- Mikkelsen M. Department of Medical Genetics, John F. Kennedy Institutet, Gl. Landevej 7-9, DK-2600 Glostrup, Denmark.
- Miller D.A. c/o Dr. H.J. Evans, MRC Clinical and Population Cytogenetics Unit, Western General Hospital, Crewe Road, Edinburgh EH4 2XU, UK.
- Millington-Ward A. Department of Human Genetics, Sylvius Laboratoria, Instituut voor Antropogenetica, Waasenaarseweg 72, 2333 AL Leiden, The Netherlands.
- Mitelman F. Department of Clinical Genetics, Lund University Hospital, S-221 85 Lund, Sweden.
- Moreau N. Laboratoire d'Histologie et Embryologie UER Medicale Lyon-Nord, 8 Avenue Rockefeller, F-69003 Lyon, France.
- Morita T. Unite de Biologie Moleculaire du Gene, Institut Pasteur, 25 Rue du Dr. Roux, F-75724 Paris Cedex 15, France.
- Moritz K. Institut für Zoologie, Luisenstrasse 14, D-8000 München 2, West Germany.
- Moriwaki K. Department of Genetics, National Institute of Genetics, Mishima, Shizuoka-ken, Japan 411.
- Moses M. Department of Anatomy, Box 3011 Duke University Medical Center, Durham, North Carolina 27710, USA.
- Mulcahy M.T. Cytogenetics Unit, State Health Laboratory Services, Queen Elizabeth II Medical Centre, GPO Box F312 Perth, 6001 Western Australia.

- Müller C.R. Institut für Humangenetik der Universität,
Albertstrasse 11, D-7800 Freiburg/i. Br., West Germany.
- Muleris M. Institut de Progenese, 15 Rue de l'Ecole de Medecine,
F-75270 Paris Cedex 06, France.
- Murer-Orlando M.L. McGill Centre for Human Genetics, Montreal
Genetic Research Institute, 1650 Cedar Avenue, Montreal,
Quebec H3G 1A4, Canada.
- Neitzel H. Institut für Humangenetik, Universität Berlin,
Heubnerweg 6, D-1000 Berlin 19, West Germany.
- Nielsen K. Institut für Humangenetik, Universität des Saarlandes,
Universitäts-Kliniken Bau 68, D-6650 Homburg/Saar, West
Germany.
- Nielsen L.B. Chromosome Laboratory, Department of Obstetrics and
Gynaecology, Rigshospitalet, Blegdamsvej 9, DK-2100
Copenhagen O, Denmark.
- Ohno S. City of Hope National Medical Center, 1500 East Duarte
Road, Duarte, California 91010, USA.
- Ott H. Fleckenweinberg 37, D-7000 Stuttgart 1, West Germany.
- Pages M. Investigaciones Cientificas Intco. Quimica Bio-Organica
CSCC, J. Girona Salgado s/n, Barcelona 34, Spain.
- Pangalos C. Cytogenetics Laboratory, "Alexandra" Hospital, 80
Vassilissis Sophias Av., Athens, Greece.
- Papes D. Department of Botany, University of Zagreb, Rooseveltov
Trg. 6/III, PO Box 933, 41001 Zagreb, Yugoslavia.
- Pardue M.L. Massachusetts Institute of Technology (Room 16-717),
Cambridge, Massachusetts 02139, USA.
- Parkin C.A. MRC Clinical and Population Cytogenetics Unit,
Western General Hospital, Crewe Road, Edinburgh EH4 2XU, UK.
- Parrington J.M. MRC Human Biochemical Genetics Unit, Galton
Laboratory, Wolfson House, 4 Stephenson Way, London NW1 2HE,
UK.
- Parry E. Department of Genetics, University College of Swansea,
Singleton Park, Swansea SA2 8PP, UK.
- Pasquali F. Istituto di Biologia Generale, Università di Pavia,
CP 217, 27100 Pavia, Italy.
- Passarge E. Institut für Humangenetik, Universitätsklinikum der
Gesamthochschule Essen, Hufelandstrasse 55, D-4300 Essen 1,
West Germany.
- Pearson P.L. Department of Human Genetics, Sylvius Laboratoria,
Instituut voor Antropogenetica, Waasenaarseweg 72, 2333 AL
Leiden, The Netherlands.
- Pellatt P. Department of Zoology, University of Leicester,
Adrian Building, University Road, Leicester LE1 7RH, UK.
- Pelling C.H.W. Max-Planck-Institut für Biologie, Spemannstrasse
34, D-7400 Tübingen, West Germany.
- de la Pena A. Departamento de Genetica, Facultad de Biologia,
Universidad Complutense, Madrid 3, Spain.
- Persson K. Department of Plant Geography, University of Göteborg,
Botaniska Traedgarden, S-413 19 Göteborg, Sweden.
- Petitpierre E. Department of Genetics, Faculty of Sciences,
Universidad Palma de Mallorca, Palma de Mallorca, Spain.
- Philip J. Department of Obstetrics and Gynaecology (Section
4032), Rigshospitalet, Blegdamsvej 9, DK-2100 Copenhagen O,
Denmark.
- Philippsen P. Biozentrum der Universität Basel, Klingelberg,
CH-4056 Basel, Switzerland.