

FOURTH INTERNATIONAL CONGRESS
OF HUMAN GENETICS

Paris, September 6-11, 1971

Chairman: Professor Maurice Lamy

Secretary General: Dr. Jean De Grouchy

Place of the Congress:

Nouvelle Faculté de Droit
et des Sciences Economiques
92, Rue d'Assas, Paris 6

Address before the Congress:

1, Rue Jules-Lefebvre, Paris 9

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Scientific Program

The scientific program of the Congress will include (a) thirteen Symposia; (b) fifteen Round Tables; and (c) Open Sessions. These will be scheduled as follows:

Monday 6: morning, opening session; afternoon, two symposia.

Tuesday 7 to Friday 10: morning, two symposia; afternoon, round tables, open sessions.

Saturday 11: morning, two symposia; afternoon, symposium "Genetics, past, present and future", closing session.

A. SYMPOSIA

The exact schedule of each symposium will be established by its chairman. It is foreseen that each symposium will last 3 to 3½ hours. The chairman will have to stand for 15 minutes and the speakers for 40 minutes, leaving ample time for discussion from the floor.

Simultaneous translation (French-English) will be available.

MONDAY 6, Afternoon

Clinical Genetics - President: V. A. McKusick

W. Lenz: Genetic diagnosis: deviations, diseases, types and varieties

C. O. Carter: Genetic counselling: principles and prospects

C. Scriver: Inborn errors of metabolism: screening and therapy

J. Littlefield: Prenatal diagnosis

E. Neufeld: The mucopolysaccharidoses: an illustration of genetic heterogeneity and prospects for therapy

S. Rogers: Genetic engineering

Radiation Genetics - President: A. C. Stevenson

H. B. Newcombe: Effects of radiation on human populations

A. G. Searle: Chromosome damage and risk assessment

A. Leonard: Données récentes sur les taux de mutations

TUESDAY 7, Morning

Population Genetics I - President: J. V. Neel

J. V. Neel: Aspects of Yanomama population structure

L. L. Cavalli-Sforza: The study of some primitive populations and its meaning for the understanding of human evolution

J. W. Schull: Primitive populations: promises and contributions to the understanding of population genetics

R. L. Kirk: Rare genetic markers of gene flow in aboriginal populations of Australia and New-Guinea

Cytogenetics I - President: C. E. Ford

B. Pedersen: Karyotype evolution in human leukaemia. On the relation between karyotypes, cellular phenotypes and clinical progression

D. G. Harnden: The specificity of acquired chromosome damage

G. E. Moore, J. Minowada: Human lymphocyte cell lines for genetic and clinical studies

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WEDNESDAY 8, Morning

Population Genetics II - President: N. E. Morton

L. S. Penrose: Human polymorphisms

G. Malecot: Sur l'importance des fluctuations locales dans une population dispersée sur une grande étendue.
Evaluation de la variance, évaluation de la corrélation, évaluation de la parenté

J. F. Crow: The effects of mutation and variability on human welfare

Cytogenetics II - President: J. L. German

M. A. Ferguson-Smith: Human chromosomes in meiosis

P. A. Jacobs: Human population cytogenetics

K. Benirschke: Mosaics, hybrids and chimeras, in vivo and in vitro

THURSDAY 9, Morning

Mental Deficiency - President: G. A. Jervis

N. C. Myrianthopoulos: Intellectual development of a prospectively studied population of twin and sibling pairs

A. R. Jensen: A two-factor theory of familial mental retardation

B. G. Scally: A survey of mentally defective parents and their offspring

Genetics of Human Enzymes and Proteins - President: H. Harris

M. K. Fagerhol: The serum α_1 -antitrypsin polymorphism

J. S. O'Brien: Genetic defects of lysosomal enzymes

D. A. Hopkinson: Genetic aspects of isozymes

FRIDAY 10, Morning

Immunogenetics - President: R. R. Race

R. R. Race: Is the Xg blood group locus subject to inactivation?

J. Dausset: La génétique du système principal d'histocompatibilité humain (HL-A)

Ch. Salmon: Complexe cis AB et locus ABO

D. C. Shreffler: Genetics and immunochemistry of the Lp antigen of human serum

Cell Genetics - President: G. Pontecorvo

B. Ephrussi: Techniques de l'hybridation cellulaire

W. F. Bodmer: Linkage analysis using human-mouse hybrids

F. H. Ruddle: New methods of chromosome identification in somatic cell hybrids

T. D. Puck: Mutation in cell cultures

SATURDAY 11, Morning

Pharmacogenetics - President: A. G. Motulsky

W. Kalow: Pharmacogenetics of drugs used in anaesthesia

E. S. Vesell: Genetic and environmental factors affecting drug levels in man

R. A. O'Reilly: Genetic factors in anticoagulant response

Chromosome Mapping - President: J. H. Renwick

- M. Siniscalco: Mapping of the human X chromosome by means of somatic cell hybrids
E. B. Robson: Gene assignment
L. R. Weitkamp: Human autosomal linkage groups

SATURDAY 11, Afternoon

Genetics, Past, Present, and Future - President: L. Gedda

- C. F. Mayer: From Plato to Pope Paul; pages from the history of population problems, and utilization of human genetic knowledge through the ages
J. Lejeune: Du bon usage de la génétique
J. Monod: Responsabilités sociales du généticien

B. ROUND TABLES

Round tables will last approximately 4 hours. Three of these will take place simultaneously each day, from Tuesday to Friday.

Simultaneous translation is planned for two round tables per day.

Provisional Program

I - AUTOMATION

A. Automation and karyotypes

President: H. Lubs

Participants: J. Lejeune, N. Wald, R. Le Go, D. Rutovitch

B. Automation and genetics

President: J. Edwards

Participants: W. Bodmer, J. Renwick, Hilden

II - HL-A SYSTEM IN HUMAN IMMUNOGENETICS

Copresidents: W. Bodmer and R. Cippellini

Secretary: J. J. Van Rood

Coordinator: J. L. Amiel

Participants: J. Dausset and J. Colombani

III - FLUORESCENCE AND CHROMOSOMES

T. Caspersson (President): Techniques for chromosome identification by fluorescence methods

L. Zech: The normal human karyotype

E. Modest: The chemical background for the fluorescence analysis of chromosome

Other Speakers: J. Lindsten and A. Levan

IV - EVOLUTION OF THE PRIMATES

President: A. E. Mourant

Moderator: J. Ruffié

Participants:

E. Zuckerkandl: L'évolution des chaînes d'hémoglobine et d'autres protéines dans certains groupes de vertébrés

J. Buettner-Janusch: Evolution of hemoglobin in Old and New World Monkeys

R. Cabannes: Les hémoglobines dans les populations humaines

A. Allison: Hemoglobin and balanced polymorphism

C. Ropartz: Les immunoglobulines chez les primates

M. Blanc: Le système Gm dans les populations humaines

Y. Moor-Jankowski: Evolution des groupes sanguins érythrocytaires des singes à l'homme

P. Lefevre-Witiers: Hemotypology in Sahara

M. Levine: L'hémotypologie du Pays Basque

J. C. Quilici: L'hémotypologie des régions andines

W. Socha: L'hémotypologie de l'Europe de l'Est

P. Colombies: L'évolution cytogénétique des primates

E. Carles-Trochain: Les caryotypes et les races humaines

Conclusion

A. E. Mourant: L'hémotypologie et les races humaines

J. Ruffié: L'hémotypologie et l'évolution

V - HEREDITY CLINICS AND MEDICAL CARE

President: A. G. Steinberg

Participants:

C. A. Clarke: Blood group incompatibility between mother and baby

F. Clarke Fraser: Screening programs

R. Rodney Howell: The role of heredity clinics in medical care

E. Inouye: Heredity counseling units in various parts of Japan, and the role of a genetics laboratory in a research institute

D. Klein: Hereditary causes of potentially blinding congenital eye diseases

A. Szeinberg: Population screening for hereditary disorders from the viewpoint of preventive medicine

F. Vogel: Problems of genetic counseling of persons treated with possible mutagens

Other participants: A. G. Bearn, B. Shannon Danes, W. Nyhan, C. R. Scriver, J. E. Seegmiller

VI - CONSTITUTIONAL BONE DISEASES

President: P. Maroteaux

Participants: K. Kozlowski, L. Lenzi, J. Lefebvre, V. A. McKusick, J. Spranger, H. R. Wiedemann

Program:

Presentation of an international nomenclature of constitutional bone diseases

Discussion of rare or unusual observations

VII - AMNIOCENTESIS

President: A. G. Bearn

Participants: B. W. Uhlenhof, A. Emery, H. Nadler, L. Penrose, D. Serr, C. Valenti, J. Littlefield

VIII - CHROMOSOMAL ANOMALIES IN SPONTANEOUS ABORTIONS

President: P. E. Polani

Moderator: A. Boué

Participants:

- K. Mikamo: Review of the different studies on spontaneous abortions
- J. G. Boué: Résultats de 1000 avortements caryotypés
- P. Gerald: Identification of the extra chromosomes in some aberrations observed in spontaneous abortions
- E. Philippe: Phénotypes des anomalies chromosomiques léthales
- P. Lazar: Epidémiologie des avortements spontanés
- D. Carr: Spontaneous abortions after oral contraceptives
- C. Thibault: Etudes expérimentales chez les mammifères

IX - GENETIC DISTANCE

Organizer: N. E. Morton

Moderator: J. F. Crow

Participants:

- Workman: Indices of biological distance
- W. M. Fitch: Protein evolution
- A. Edwards: Phylogenetic trees
- A. Jacquard: Arbres généalogiques
- W. Bodmer: Migration matrices
- M. Nei: A new measure of distance
- J. W. Schull: Monte Carlo simulation
- N. Morton: Bioassay of kinship

X - MOLECULAR GENETICS

Moderator: J. C. Dreyfus

Participants: A. Motulsky, S. Gartler, J. C. Kaplan, J. O'Brien, R. Krooth, E. Kohen, F. Schapira

Themes:

- Molecular genetics of glucose-6-phosphate dehydrogenase
- Genetic expression of certain enzymatic activities in tissue culture

XI - GENETIC HAZARDS OF THE ENVIRONMENT

President: F. H. Sobels

Participants: J. H. Renwick, B. A. Bridges, J. F. Crow

XII - HEREDITARY DISEASES OF METABOLISM

President: H. Bickel

XIII - GENETICS OF IDIOPATHIC HYPER- AND HYPOLIPIDEMIAS

Organizer: J. L. De Gennes

XIV - CHRONOLOGY OF THE GENE

A. *Introduction and definition of the Ergon/Chronon system*

L. Gedda: Introduction to the chronology of the gene and to the Ergon/Chronon system

G. Brenci: Models for the study of chronologic aspects of the gene

B. *Applications of the Ergon/Chronon system*

1. *Obstetrics and Gynaecology*

I. Halbrecht: The parameters of biological time in obstetrics and gynaecology

2. *Cytogenetics and Neoplasia*

M. Bartalos: The time factor in cytogenetics and neoplasia

3. *Mental Diseases*

J. D. Rainer: Chronologic parameters, twin studies and mental diseases

L. Braconi: A twin study of the time of onset in schizophrenia

L. Gedda, R. Tatarelli: Essential isochronic epilepsy in MZ twin pairs

4. *Nervous System*

G. Del Porto, A. Del Porto-Mercuri, G. Brenci: Muscular dystrophy: clinical times and the Ergon/Chronon system

L. Gedda, A. Alfieri, R. Tatarelli: Genealogical and twin study of "primitive enuresis" and its chronological aspects

5. *Dermatology*

R. Cavalieri: Genetic information and the Ergon/Chronon system in skin diseases

6. *Human Diversity*

P. Parisi, B. de Rachewiltz: The time dimension and human diversity

C. *Conclusions*

L. Gedda: Development, senescence and disease in the light of the Ergon/Chronon system

XV - GLYCOPROTEINS AND GLYCOLIPIDS

Moderator: P. Durand

Participants: E. G. Bruungraber, H. G. Hers, Van Hoof, H. Loeb, M. Philippart

C. OPEN SESSIONS

Free papers will be grouped by themes and the sessions will be scheduled accordingly. Each session will be directed by a chairman. The time of speech will be 10 minutes with 5 minutes discussion.

Simultaneous translation will not be available.

A definite program will be distributed at the opening of the Congress.

INTERNATIONAL CONFERENCES ON DERMATOGLYPHICS

The "International Conferences on Dermatoglyphics" will organize three half-day sessions. Those who wish to attend these sessions should register as members of the Congress.

Cosecretary: H. Warner Kloepfer
Tulane University School of Medicine
Department of Anatomy
1430 Tulane Avenue
New Orleans, La. 70112, USA.

PERMANENT INTERNATIONAL COMMITTEE

The Permanent Committee responsible for the organization of Human Genetics Conferences will meet under the chairmanship of Dr. F. Clarke Fraser in order to plan the Fifth Congress of Human Genetics.