\[ X^2 = \sum_{i=1}^{K} \sum_{j \geq i} (X_{ij} - E_{ij})^2 / E_{ij} \]
Cleft lip and palate is a complex, multifactorial and relatively common craniofacial disorder, which arises because of disrupted facial development in the embryo. The manifestations of this condition can be life-long and associated with significant morbidity. In the last decade, progress has been made in our understanding of how clefts of the lip and palate arise in human populations, and laboratory studies are beginning to elucidate the molecular mechanisms that control development of the lip and palate. In addition, advances in surgical and medical care, and long-term rehabilitation are improving outcome and quality of life for affected individuals. Written by international experts in their respective fields, this publication covers in detail the epidemiology and genetic basis of cleft lip and palate, the developmental biology of lip and palate formation and provides current concepts in the management of patients affected by this condition. Thus, the book provides a contemporary overview of the epidemiology, aetiology and treatment of cleft lip and palate, and will be of use to a wide range of individuals, including students, biologists and clinicians, who have an interest in this subject.

Contents

Foreword: Shaw, B.
Preface: Cobourne, M.T.
Epidemiology of Oral Clefts 2011: An International Perspective: Mossey, P.A.; Modell, B.
Genetic and Environmental Factors in Human Cleft Lip and Palate: Vieira, A.R.
The Mouse as a Developmental Model for Cleft Lip and Palate Research: Gritli-Linde, A.
Hedgehog Signalling in Development of the Secondary Palate: Cobourne, M.T.; Green, J.B.A.
Roles of BMP Signalling Pathway in Lip and Palate Development: Parada, C.; Chai, Y.
Development of the Lip and Palate: FGF Signalling: Stanier, P.; Pauws, E.
Wnt Signalling in Lip and Palate Development: He, F.; Chen, Y.
Treatment Outcome for Children Born with Cleft Lip and Palate: Sandy, J.; Kilpatrick, N.; Ireland, A.
Surgical Correction of Cleft Lip and Palate: Jayaram, R.; Huppa, C.
Speech and Language in the Patient with Cleft Palate: Mildinhall, S.
Future Directions: Molecular Approaches Provide Insights into Palatal Clefting and Repair: Liu, K.J.
Human Heredity

International Journal of Human and Medical Genetics

Founded 1948 as 'Acta Genetica et Statistica Medica' by Gunnar Dahlberg (1948/1950–1964)
Continued in 1965 by M. Hauge (1965–1968)
Changed in 1969 to 'Human Heredity'

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ISSN Print Edition: 0001–5652
ISSN Online Edition: 1423–0062

Journal Homepage: www.karger.com/hhe

Publication Data: ‘Human Heredity’ is published 8 times a year. Volumes 73, 74, each with 4 issues, appear in 2012.

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Contents

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Modern medicine is now in a position to make advanced prognoses that chart the entire course of illness and recovery. Paradoxically, this is coupled with a new dimension of uncertainty for the patient, i.e. coming to terms with discovering they have an increased risk of a particular disease and deciding what appropriate steps to take. In this publication, renowned experts in their fields discuss these issues. The certainty and uncertainty of one’s fate are discussed from both methodological and epidemiological perspectives, using examples of diseases for which treatment and prognosis have dramatically changed. Despite profound insights into the human genome, personalized genetically tailored medicine still lies in the future. Religious, spiritual and philosophical dimensions are discussed, as are the ways in which they may help people cope with these new insights into their future, e.g. the promise of an afterlife.

This publication aims to bridge the different fields dealing with this area by addressing the challenges faced and encouraging dialogue. It will be of interest to all readers who deal with ethical problems of prognosis, particularly in medicine, as well as to theologians and sociologists.

### Contents

**Introduction:** Pfl eiderer, G.; Battegay, M.; Lindpaintner, K.

**Medical Perspectives**
- Evolving Therapy and Prognosis in HIV – How Knowing One’s Medical Fate in Advance Can Change Dramatically: Battegay, M.
- Related to Human Cognition: Is Personalization Feasible and Desirable?: Papassotiropoulos, A.

**Ethical and Juridical Perspectives**
- Ethical Decision-Making on Genetic Diagnosis Facing the Challenges of Knowing One’s Medical Fate in Advance: Brahier, G.
- Predictive Medicine – Changes in Our View of Ourselves and Others: Birnbacher, D.
- Current Challenges for the Law: Disclosure Dilemmas in Predictive Medicine: Dörr, B.S.

**Religious Perspectives**
- Fate and Judaism – Philosophical and Clinical Aspects: Gesundheit, B.
- Karma, Contingency, and the ‘Point of No Return’: Predictive Medicine and Buddhist Perspectives: Schlieter, J.

**Author Index**

**Subject Index**
During the last decades, Cytogenetic and Genome Research has been the leading forum for original reports and reviews in human and animal cytogenetics, including molecular, clinical and comparative cytogenetics. In recent years, most of its papers have centered on genome research, including gene cloning and sequencing, gene mapping, gene regulation and expression, cancer genetics, comparative genetics, gene linkage and related areas. The journal also publishes key papers on chromosome aberrations in somatic, meiotic and malignant cells. Its scope has expanded to include studies on invertebrate and plant cytogenetics and genomics. Also featured are the vast majority of the reports of the International Workshops on Human Chromosome Mapping, the reports of international human and animal chromosome nomenclature committees, and proceedings of the American and European cytogenetic conferences and other events. In addition to regular issues, the journal has been publishing since 2002 a series of topical issues on a broad variety of themes from cytogenetic and genome research.

Selected contributions
Heterogeneity of Pericentric Inversions of the Human Y Chromosome: Knebel, S. (Freiburg), Pasantes, J.J. (Freiburg/Vigo), Thi, D.A.D.; Schaller, F.; Schempp, W. (Freiburg)
Duplication 5q and Deletion 9p due to a t(5;9)(q34;p23) in 2 Cousins with Features of Hunter-McAlpine Syndrome and Hypothyroidism: Vásquez-Velásquez, A.I.; García-Castillo, H.A.; González-Mercado, M.G.; Dávalos, I.P. (Guadalajara), Raca, G.; Xu, X.; Dwyer, E. (Madison, Wis.); Rivera, H. (Guadalajara)
Visualization of Fine-Scale Genomic Structure by Oligonucleotide-Based High-Resolution FISH: Yamada, N.A. (Santa Clara, Calif.); Rector, L.S. (Salt Lake City, Utah); Tsang, P.; Carr, E.; Scheffer, A. (Santa Clara, Calif.); Sederberg, M.C.; Aston, M.E. (Salt Lake City, Utah), Ach, R.A.; Tsalenko, A.; Sampas, N.; Peter, B.; Bruhn, L. (Santa Clara, Calif.), Brothman, A.R. (Salt Lake City, Utah)
19p13.3 Aberrations Are Associated with Dysmorphic Features and Deviant Psychomotor Development: Siggbarg, L. (Helsinki), Olsen, P. (Duluth), Näänti-Salonen, K. (Turku), Knuttila, S. (Helsinki)
Telomere Capture as a Frequent Mechanism for Stabilization of the Terminal Chromosomal Deletion Associated with Inverted Duplication: Yu, S.; Graf, W.D. (Kansas City, Mo.)
Epigenetic Regulation of Pericentromeric Heterochromatin during Mammalian Meiosis: Khalil, A.M.; Driscoll, D.J. (Gainesville, Fla.)
Original Papers

123 An Information Theory Analysis of Gene-Environmental Interactions in Count/Rate Data
   Knights, J.; Ramanathan, M. (Buffalo, N.Y.)

139 Two-Stage Extreme Phenotype Sequencing Design for Discovering and Testing Common and Rare Genetic Variants: Efficiency and Power

148 Detecting Rare Variants for Quantitative Traits Using Nuclear Families
   Guo, W. (Bethesda, Md./Changchun); Shugart, Y.Y. (Bethesda, Md.)

159 Efficient Adaptively Weighted Analysis of Secondary Phenotypes in Case-Control Genome-Wide Association Studies
   Li, H. (New York, N.Y.); Gail, M.H. (Rockville, Md.)

174 A Confidence Set Inference Method for Identifying SNPs That Regulate Quantitative Phenotypes
   Papachristou, C. (Philadelphia, Pa.); Lin, S. (Columbus, Ohio)