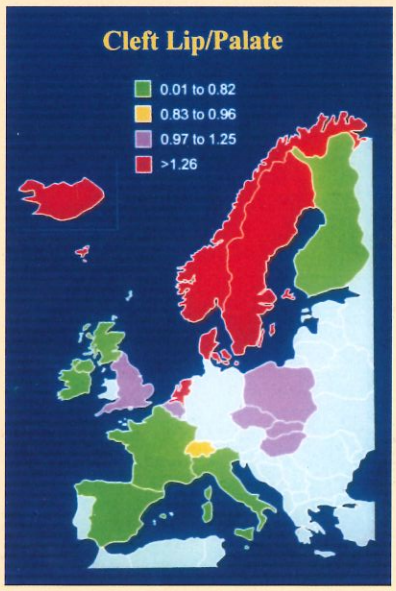
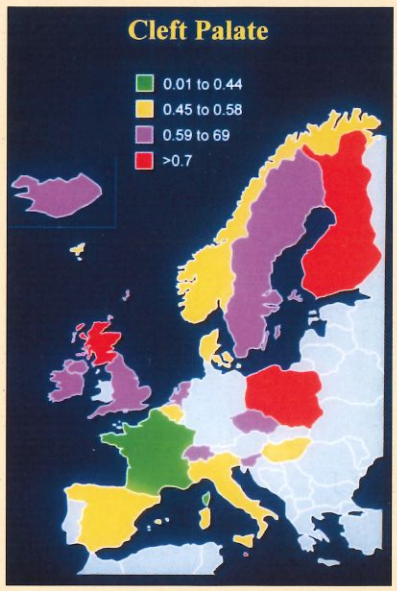
# Eurocran
## European Collaboration on Craniofacial Anomalies

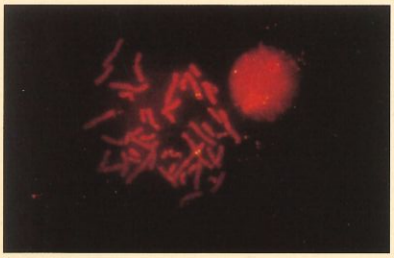
In 2000 a team of 14 European centres was awarded funding under the European Commission's Framework V Programme for research to carry out the EUROCRAN project. EUROCRAN, which will run for four years between 2000 and 2004 brings together researchers from a range of clinical/scientific disciplines with the shared aim of improving the management and understanding of craniofacial anomalies (CFA). This will be achieved through five inter-related work packages:



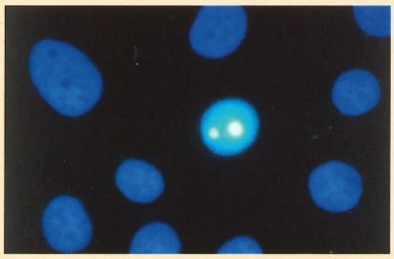

Prevalence in Europe at birth of cleft lip with or without cleft palate.



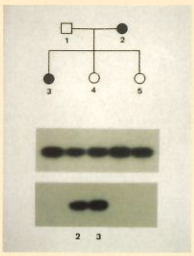

Prevalence in Europe at birth of isolated cleft palate.



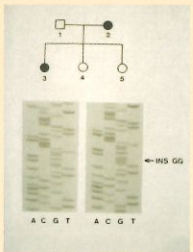
A spread of chromosomes stained orange: the specific location of the TCS gene on chromosome 5 appears as two yellow dots.



The protein encoded by the TCS gene localises to the nucleolus of the cell and appears here as two green dots.




A probe that specifically detects the mutation is only present in affected members of the family, in this case numbers 2 and 3.




In a family with TCS a mutation can be seen on one chromosome. In this family two nucleotides are inserted (indicated by arrow).

First meeting of the EUROCRAN Project Management Team, 5-8 October 2000, Manchester, UK.

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**Work Package 1: Surgical Trial**

A multicentre randomised trial of the primary surgery for infants with complete unilateral cleft lip and palate will compare four surgical methods in three concurrent trials. Infants will be randomised either to a surgical method common to all three trials or the usual local method.

**Work Package 2: Gene/Environment Study**

A population based multicentre case-parent triad study to investigate gene/environment, and gene/gene interactions and genetic susceptibility polymorphisms operating in the aetiology of orofacial clefting (OFC) will be carried out. Methodology will include a maternal interview on diet and other exposures in the periconceptual period and DNA sampling of mother, father and child leading to gene variant analysis.

**Work Package 3: A Chromosomal Approach to Identifying OFC Genes**

Following breakpoint/clinical phenotype analysis in a cohort of European patients with OFC, where two or more instances of a specific breakpoint are associated with clefting, high throughput molecular cytogenetic techniques and available sequence data from the Human Genome Project will be used to identify interrupted genes. These genes will be fully characterised and screened for mutations and polymorphisms that may be used in Work Package 2.

**Work Package 4: Molecular Diagnosis of Monogenic Craniofacial Anomalies**

Sensitive molecular assays for the mutations underlying a number of craniofacial malformation syndromes using Treacher Collins Syndrome (TCS) as a paradigm will be developed. This expertise will be disseminated to other molecular laboratories in the EUROCRAN group such that it will be available on a local basis.

**Work Package 5: Directory of Resources**

A European Craniofacial Anomalies Directory of resources for European teams will be created to include: a register of clinical teams, protocols and research interests, agencies involved in the treatment and research of CFA, European surgical missions to developing countries, model research protocols and grant applications; a website of emerging data from Work Packages 2 and 3; a "good practice" set of consecutive clinical records with which European teams can compare their own records; a prospective registry of complex treatment outcomes using distraction osteogenesis as an exemplar.

**Participation**

The work will be achieved through the development of common core protocols and with the involvement of participating centres from the European Union, the European Economic Area and the states of Central and Eastern Europe.

If you would like to participate or require more information please contact:


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