Programme

12th International Congress of the International Society for Twin Studies
ICTS 2007, Ghent, Belgium 8-10 June 2007

www.twins2007.be
Friday 8 June 2007

Conference Theme: Twin and multiples- a life course perspective
From conception to childhood

09:00 OPENING CONGRESS

09:15 KEYNOTE LECTURE
“The Life and Death of Chang and Eng”
Roger Short

10:00 Coffee Break and Poster Session
COMBO shareshop in COMBO room
Grab some coffee and come visit with COMBO members
Topics of discussion: Organizational Support Services and Fundraising

10:30 PRESIDENTIAL ADDRESS
“The Twin studies in the 21th century”
Jaakko Kaprio

11:15-12:45 PARALLEL SESSIONS

P1: Freemartins and Chimeras scientific and clinical implications

Chairs: C.B. Lambalk
C. Derom

11:15 Freemartins; history, biology and possible clinical relevance
Lambalk C.B.

11:35 Chimeras and Embryogenesis of DZ Twins
Boklage C.

11:55 Genetic marker analysis in common and rare cases of twinning
Montgomery G.W.

12:15 Embryological timing in mirror-imaging twinning
Teplica D., Derom C., Peekna K., Derom R.

P2: DAVID LYKKEN SYMPOSIUM

Chair: N. Segal

11:15 Two peas or not two peas? twin relationships and the associated personality similarities and differences
Johnson W.

11:35 The Minnesota Twin Family Study: David Lykken's lasting legacy to developmental behavioral genetics
McGue M., Iacono W.G.

11:55 Human Research is More Interesting, and More Informative, if Done with Twins: Results from FinnTwin Studies
Rose R.J.

12:15 Chinese twin children reared apart and same-age unrelated children reared together: mirror-image look at behavioral development
Segal N.L., Hoven Stohs J., McGuire S.A.
P3: COMBO I: RESEARCH STUDIES

Chair: J. Mascazine

11:15  School Placement and Social Issues of Twins and Multiples
       Mascazine J.

11:35  Development & Characteristics of triplets
       Disselkamp C.

11:50  Long-term effects of pre-term Multiple Birth
       Griffith S., Adcock M.

12:10  Share your twinterest
       Glahn A.

12:25  The correlation of birthweight and length of multiple birth children to height and weight of
       parents and gestational age
       Wimberly T.B., Fry M.

12:45-13:45  Lunch

13:45-15:15  PARALLEL SESSIONS

P4: Monochorionic twin pregnancies: complications and management options
P5: Fetal programming
P6: Growth and development

P4: MONOCHORIONIC TWIN PREGNANCIES: COMPLICATIONS AND
MANAGEMENT OPTIONS

Chair: L. Lewi

13:45  The natural history of MC twins
       Lewi L.

14:05  Prenatal diagnosis and recommended follow-up of MC twins
       De Catte L.

14:25  The management of discordant anomalies in MC twins
       Deprest J.

15:45  The management of severe discordant growth in MC twins
       Gratacos E.

P5: FETAL PROGRAMMING

Chair: A. Iliadou

13:45  Fetal programming and future mental health
       Lichtenstein P., Chnttingius S., Iliadou A., Hultman C

14:05  Fetal programming & implications of intrauterine growth for the development of Type 2
       diabetes
       Poulsen P.

14:25  Effects of chorion type on personality in south korean preschooler twins
       Hur Y-M., Yoon S.I.

14:40  Modeling genetic and environmental factors to increase heritability and ease the identification of
       candidate genes for birth weight: a twin study
       Gielen M., Lindsey P.J., Derom C., Smeets H.J.M., Souren N.Y., Paulussen A.D.C., Derom R.,
       Nijhuis J.G.

14:55  Can we generalise from findings in twins?
       Morley R.
P6: GROWTH AND DEVELOPMENT

Chair: K. Ohm Kyvik

13:45 Explaining the causes of phenotypic variation in the teeth of twins
Townsend G., Richards L., Hughes T.

14:00 Recurrence risk among offspring of twins discordant for oral cleft
Grosen D., Bille C., Skytthe A., Murray J.C., Christensen K.

14:15 Emergence of primary incisors in Australian twins
Hughes T., Townsend G., Seow K., Gotjamanos T., Gully N., Bockmann M., Richards L.

14:30 Genetics of BMI: should we take the influence of child bearing into account?
de Geus E.J.C., Posthuma D., Boomsma D.I.

14:45 The nature and nurture of obesity in children: the abnormal is normal
Haworth C.M.A., Plomin R., Cardelli S., Wardle J.

15:00 Genetic regulation of growth from birth to 18 years of age: The Swedish Young Male Twins Study. Silventoinen K., Pietiläinen K.H., Tynelius P., Sørensen T. I. A., Kaprio J., Rasmussen F.

15:15 Coffee Break and Poster Session

15:45 KEYNOTE LECTURE:
“TWIN-TO-TWIN-TRANSFUSION SYNDROME”
JAN DEPREST

Room: Refer

16:30-18:00 PARALLEL SESSIONS:

P7: Controversies on obstetric issues
P8: East Flanders Twin Study
P9: Genetics of normal and abnormal behaviour in childhood & adolescence

P7: CONTROVERSIES ON OBSTETRIC ISSUES

Chair : C. Hubinont

16:30 Maternal Obesity at Delivery and Birth Weights in Twins
Czukerberg D., Tewari H., Lampley E.C., Blankstein J.

16:45 Vanishing twin syndrome and development of the survived twin
De Pascalis L.L.D., Monti F., Fagandini P., Agostini F., Blickstein I., La Sala G.B.

17:00 Psychological characteristics of survivors of “vanishing twin” phenomenon
Hayton A.

17:15 Evidence-based prenatal follow-up of twin pregnancies
Jacquemyn Y.

17:30 Sudden infant death syndrome in twins and singletons
Pharoah P.

17:45 Concordance in obstetric factors experienced by Australian MZ and DZ twins in their first deliveries
TRELOAR S.A.

P8: EAST FLANDERS TWIN STUDY

Chair: M. Thomis

16:30 The fetal origins of adult disease – a twin approach
Loos R.J.F., Beunen G., Fagard R., Derom C., Vlietinck R.
16.45 Stress-related negative affectivity and genetically altered serotonin transporter function: evidence of synergism in shaping risk of depression
   Jacobs N., Kenis G., Peeters F., Derom C., Vlietinck R., van Os J.

17.00 Longitudinal Genetic Analysis of Tobacco Use in Adolescent LLTS Twins
   Maes H.H., Thomis M., Peeters M., Loos R., Claessens A., Derom C.,
   Vlietinck R., Beunen G.

17.15 Genetic and environmental determination of tracking in subcutaneous fat distribution during adolescence

17.30 The Leuven Genes for Muscular Strength Study: genome-wide SNP linkage scan for maximal isometric knee strength
   Thomis M., De Mars G., Windelinckx A., Peeters M., Huygens W., Aerssens J., Vlietinck R.,
   Beunen G.

P9: Genetics of Normal and Abnormal Behaviour in Childhood & Adolescence

Chair: J. Harris

16.30 Generalist genes, specialist environments and the internet generation: Etiology of learning abilities using web-based testing at 10 years
   Davis O.S.P, Kovas Y., Harlaar N., Petrill S.A., Dale P.S., Plomin R.

16.45 Multivariate genetic analysis of anxiety dimensions in young Italian twins
   Fagnani C., Delfino D., Ogliari A., Patriarca V., Pesenti-Gritti P., Spatola C.A.M., Stazi M.A.,
   Battaglia M.

17.00 Genetic influence on eeg power associated with working memory
   Hansell N.K., Thornell T.J., Geffen G.M., Martin N.G., Wright M.J.

17.15 Genetics of normal and abnormal behavior in childhood. The abnormal is normal: the same genetic and environmental factors affect normal variation in mathematical ability and common mathematical disability
   Kovas Y., Haworth C.M.A., Petrill S.A., lomin R.

17.30 Singleton, twin and triplet differences and genetic effects on handedness
   Vuoksimaa E., Koskenvuo M., Kaprio J.

17.45 Influence of unique environmental factors on physical activity participation: role of the built environment
   Duncan G.E., Goldberg J., Noonan C., Moudon A.V., Hurvitz P., Buchwald D.

Social Program:

18:30-20:30  Get-together Reception in the City Hall of the City of Ghent
Saturday 9 June 2007
Theme: Twin and multiples- a life course perspective
Day II: Adolescence to middle-age

08:30 KEYNOTE LECTURE
"THE GENOMEUTWIN PROJECT"
LEENA PELTONEN

09:15 KEYNOTE LECTURE
"TWINNING AFTER INFERTILITY TREATMENT (ART)"
JAN GERRIS

10:00 Coffee Break and Poster Sessions

10:30- 12:00 PARALLEL SESSIONS
P10: Risks of ART
P11: Genomeutwin: Cardiovascular risk factors
P12: COMBO II: Organizational studies

P10: RISKS OF ART

Chair: I. Delbaere

10:30 SET: from concept to practice
Gerris J.

10:50 SET and the Belgian model
De Sutter P.

11:10 Perinatal outcome of singletons after SET
Delbaere I.

11:30 The association between prenatal maternal expectations and adjustment to the maternal role among mothers of twins: comparison between IVF and spontaneously conceived mothers
Baor L., Soskolne V.

11:45 Assisted Conception: are parents of twins willing to tell researchers?
Raj S., Morley R

P11: GENOMEUTWIN: CARDIOVASCULAR RISK FACTORS

Chair: J. Kaprio

10:30 Analysis of lipid fractions in Dutch twin families

10:50 Heritability of QT interval. How much is explained by genes for resting heart rate?
Snieder H., Dalageorgou C., Ge D., Carter N.D., Spector T.D., Jamshidi Y.

11:05 Longitudinal studies on cardiovascular risk factors in adolescent and adult twins
Whitfield J.B., Middelberg R.P.S., Medland S.E., Martin N.G.

11:20 Twin-family studies of moliness and other melanoma risk factors
Martin N.G.

11:35 Heritability of age-related cataract: an Italian twin study
Stazi M.A., Cotichini R., Fagnani C., Ferrigno L., Gregorio A., Rinaldi C., Williams S.L., Maraini G.


**P12: COMBO II: ORGANIZATIONAL STUDIES**  

**Chair:** S. Griffith

10:30 Association jumeaux  
*Herbener S.*

10:50 Tamba’s Multiple-Specific Parenting Course  
*Rimmer J.*

11:05 Tamba’s relationship survey  
*Robins C.*

11:25 Creating awareness in multiple birth issues and challenges  
*Moore G.*

11:40 Tamba Challenges, Progress & Achievement  
*Forbes H.*

12:00-13:00 Lunch  
COMBO Shareshop in COMBO room  
Grab some lunch and come visit with COMBO members  
Topics of discussion: Membership Structures and Utilizing Technology

**13:00- 15:30 PARALLEL SESSIONS**

**P13: Multilevel modelling**

**Chair:** J. Goldberg

13:00 Accounting for confounding in the co-twin case control design  
*MacGregor A., Spector T., Skinner J., Skidmore P.*

13:18 Modelling multiple source risk factor data and health outcomes in twins  
*Goldberg J., Bogart A.*

13:36 Interpreting between- and within-pair regression coefficients in models for twin data  
*Gurrin L.C., Scarrah K.J., Carlin J.B., Byrnes G.B., Dite G.S., Hopper J.L.*

13:54 The associations of gestational age and intrauterine growth with systolic blood pressure in a family based study of 386,485 men from 331,089 Swedish families  
*Rasmussen F., Tynelius P.*

14:12 Considerations in the analysis of research studies using sibling data  
*Begg M.D.*

**P14: GenomEUtwin: Linkage and association**

**Chair:** M. Perola

13:00 Combined linkage scan of body mass index in European-originated twin-cohorts  
*Kettunen J.A., Perola M., Peltonen L.*

13:20 Genome-wide linkage analyses of lipid profile biomarkers in the GenomEUtwin cohort - results from pooled data and meta analysis  
*Magnusson P.K., Lebrec J.J., Falchi M., Perola M., Peltonen L.*

13:40 Combined genome scans for body stature in 6602 European twins: evidence for common Caucasian loci  
*Perola M., Sammalisto S., Kettunen J., Hiekkalinna T., Peltonen L.*
14:00 Genome wide linkage scan for 25-OH vitamin D serum level in a female Caucasian population

**P15: EDUCATIONAL WORKSHOP: "MEETING THE EDUCATIONAL NEEDS OF MULTIPLE BIRTH CHILDREN"**
Room Blanquart

Chairs: P. Preedy
D. Hay

13:00 Videoanalysis of siblings at play – twins and non-twins and their cooperative behaviour
Clodius S., Watzlawik M.

13:20 Workshop

14:30 Coffee Break and Poster Sessions

15:00- 16:30 PARALLEL SESSIONS

P16: Association & linkage studies II
P17: Mental health and Substance abuse
P18: Twin relationships

**P16: ASSOCIATION & LINKAGE STUDIES II**
Room: Refter

Chair: S. Medland

15:00 Detecting bone size quantitative trait loci using dxa imaging
Chinappen-Horsley U., Blake G., Fogelman I., Kato B., Spector T.

15:18 No thanks, it keeps me awake”: the genetics of coffee-attributed sleep disturbance
Luciano M., Zhu G., Kirk K.M., Gordon S.D., Heath A.C., Montgomery G.W., Martin N.G.

15:36 Association between variants in the lep gene and its receptor (lepr) with birth weight and pre-diabetic phenotypes in young healthy twins

15:54 Genome-wide linkage scan for exercise participation across seven countries participating in the GenomEUtwin project
de Moor M H.M., Boomsma D.I., Martin N.G., Spector T.D., de Geus E.J.C.

16:12 Modeling parent of origin linkage effects using the IBD mixture distribution approach
Medland S.E., Luciano M., Morley K.I.

**P17: MENTAL HEALTH AND SUBSTANCE ABUSE**
Room Vermeylen

Chair: D. Dick

15:00 Understanding environmental influences on adolescent substance use: Data from the Finnish Twin Studies

15:18 Predictors of cannabis use among Finnish adolescent twins
Korhonen T., Huizink A., Dick D., Pulkkinen L., Rose R., Kaprio J.

15:36 Perceptions of parenting and adolescent alcohol use: Predictive utility, disparity, and twin concordance
Latendresse S.J., Rose R.J., Viken R.J., Pulkkinen L., Kaprio J., Dick D.M.

15:54 Longitudinal Genetic Analysis of Tobacco Use in Adolescent (VTSABD) Twins
Maes H.H., Silberg J.L., Eaves L.J.

16:12 Neuropsychological functioning and adolescent and early adult substance use: Between- and within-family analyses
Viken R.J., Kaprio J., Tuulio-Henriksson A., Vuoksimaa E., Rose R.J.
Chair: E. Thiery

15:00  Compromised or competent?: Twin children’s social development
Thorpe K., Danby S., Hay D., Stewart E.

15:15  Co-twin relationship and heritability of smoking behavior
Penninkilampi-Kerola V., Rose R.J., Kaprio J.

15:30  Identity development in adolescent twins and non-twins
Watzlawik M.

15:45  Behavioural difficulties in early childhood: twin-singleton and twin type comparisons
Thorpe K., Hay D., Danby S.

16:00  Twin pair contact and similarity in personality: A 11 years longitudinal study
Rebollo I., Boomsma D.I.

16:15  Twin’s intrapair relationships, family structure and academic achievement
Parshikova O., Egorova M., Chertkova Y., Pyankova S., Zyrianova N.

16:30-17:30  Business meeting

Room: Blanquart

Social Program:

20:00-23:00  Congress Dinner in the Castle of the Counts of Flanders
Sunday 10 June 2007

Theme: Twin and multiples - a life course perspective

Day III: Old age, longevity and longitudinal studies

09:15-10:45 PARALLEL SESSIONS

P19: Genetics and epi of twinning
P20: Statistical issues
P21: COMBO III: Business/Research

P19: GENETICS AND EPI OF TWINNING

Chairs: G. Montgomery
        C. Lambalk

09:15 Genetic studies of dizygotic twinning in The Gambia (West Africa)
        Sirugo G.

09:30 Can we predict the evolution of the twin birth rate in Belgium?
        Hennequin Y., Slechten D., Place I., Gerard C., Pardou A., Vanhaesebrouck P.

09:45 Body composition, smoking and dizygotic twinning
        Hoekstra C., Willemsen G., Beijsterveld van C.E.M., Montgomery G.W, Boomsma D.I.

10:00 Multiple implantation is not hereditary

10:15 Dizygotic twinning is associated with variation in oocyte growth factor genes
        Montgomery G.W., Palmer J.S., Zhao Z.-Z., Martin N.G., Boomsma D.I., Duffy D.L.

10:30 Paternal Inheritance of Monozygotic Twinning In Anglo-Norman Scottish Families
        St Clair J.B., Golubovsky M.D.

P20: STATISTICAL ISSUES

Chair: C. Reynolds
       N. Pedersen

09:15 An extended model for GxE interactions in twin data
        Neale M.C., Keller M.C.

09:30 Twin association analyses of growth curves using SAS PROC Mixed
        Reynolds C.A., McArdle J.

09:45 Genetic influence on dynamics of cognitive decline in late age
        Ripatti S., Palmgren J., Pedersen N.L.

10:00 Biometric analysis of dynamic relationship between processing speed and cognitive aging
        Finkel D., Reynolds C.A., McArdle J.J., Pedersen N.L.

P21: COMBO III: BUSINESS/RESEARCH

Chair: M. Adcock

09:15 Multiple Birth Data Collection
        Fry M.L., Wimberly T.B.

09:35 Potpurri of Multiple Birth Loss
        Pector E.A., Kollantai J.

09:50 Multiples & Families Coping with Adolescence & Substance Abuse
        Keating J.

10:10 Ready, Steady, GO! Developing Learning Through Movement
        Preedy P.
10:25  **COMBO Business Session, including election of officers**

10:45  Coffee Break and Poster Sessions

**11:15- 12:45 PARALLEL SESSIONS**

**P22: SUBSTANCE USE/ABUSE AND PHARMLOGENETICS  Room: Refter**

Chair:  N. de Klerk

11:15  Testing the validity of the equal environments assumption using Western Australian Twin Register (WATR) data  
*Hansen J., Alessandri P.T., de Klerk N.H., Burton P.R.*

11:33  Smoking, Twins & Heritability  
*Byrnes G.B., White V., Hopper J.L.*

11:51  Variance components for exhaled Nitric Oxide in twin families  
*Coleman K.P., Hansen J., James A.L., de Klerk N.H., Palmer L.J.*

12:09  Association between urinary cotinine and biomarkers for oxidative stress in monozygotic twins of Korea: Healthy Twin study  
*Ha M., Sung J., Song Y.M., Lee K., Cho S.I., Kim H.*

12:27  The importance of genes and environmental factors for symptoms of night eating among 4964 pairs of twins from Sweden.  
*Ramussen F., Tholin S., Tynelius P.*

**P23: AGEING-RELATED DISEASES AND CONDITIONS  Room: Vermeylen**

Chair:  K. Christensen

11:15  The heritability of somatic symptoms in a Sri Lankan twin sample  
*Ball H.A., Siribaddana S., Sumathipala A., McGuffin P., Hotopf M.*

11:30  Genetic Susceptibility to Herpes Virus Infection: Twin Concordance of Infectious Mononucleosis and Herpes Zoster  
*Hwang A., Mack T., Hamilton A., Zadnick J., Cozen W.*

11:45  Prevalence of premature ovarian failure in Australian twins  

12:00  Chronic anti-epileptic drug (aed) treatment is associated with inferior balance function in aed-discordant twin and matched-sibling pairs  
*Petty S.J., El Haber N., Paton L.M., O’Brien T.J., Berkovic S.F., Hill K., Wark J.D.*

12:15  Lack of association between leukocyte telomere length and genetic variants in two aging related candidate genes  
*Kato S.B., Jeffery P.G., Masayuki K., Spector D.T., Ahmadi K.*

12:30  Heritability of reproductive hormones in adult male twins  

**P24: NOVEL WAYS TO USE TWINS  Room: Blanquart**

Chair:  K. Scurrah

11:15  Can twin studies be used to infer causation?  
*Hopper J.L., Byrnes G.B., Gurrin L.C., Dite G.S., Scurrah K.J., Seeman E.*

11:35  Using Twins to Study Immune-Related Risk Factors  
*Cozen W., Islam K.T., Mack T.M.*

11:55  Beyond Heritability: Alternative study designs for investigating complex disease etiology using twins  
*Mack T., Cozen W., Hamilton A.S., Cockburn M.*
12:15  Investigating epigenetic biomarkers underlying phenotypic discordance in monozygotic twins
Wong N.C., Joo E.J., Weinrich B., Mossman D., Scott R.J., Morely R., Craig J.M., Saffery R.

12:45-13:45  Lunch
COMBO Shareshop in COMBO room
Grab some lunch and come visit with COMBO members
Topics of discussion: Education of Multiples

13:45- 15:15  PARALLEL SESSIONS

P25: Relationships within families of twins
P26: Normal aging
P27: Twin registers and International Collaborations

P25: RELATIONSHIPS WITHIN FAMILIES OF TWINs  Room: Refer

Chair:  K. Thorpe

13:45  Twin relationship, peer relationship: A case study of a female MZ twin pair in a preschool setting
Danby S., Thorpe K., Hay D.

14:00  Same and different/fair and balanced: An anthropological analysis of identical twins and the embodiment of core cultural values in North America
Davis D.L.

14:15  Relationship among twin language, twins’ bond, and social competence
Hayashi C., Hayakawa K., Onoi M., Nishihara R., Amou Y.

14:30  A case study of the breakdown of an intrapair relationship
Sandbank A.

14:45  Birth order -- a new variable?
Stewart E.A.

15:00  Inter-twin and parent-twin relationships and mental-health
Trias T., Ebeling H., Penninkilampi-Kerola V., Moilanen I.

P26: NORMAL AGING  Room Vermeylen

Chair:  L. Cherkas

13:45  Twins, telomeres and aging

14:00  Leukocyte telomeres and mortality: a study in elderly Danish twins

14:15  On the characterization of advanced age mortality
Hjelmborg J., Kaprio J., Pedersen N.L., Christensen K., Goedebeur Y.

14:30  Are symptoms of post-traumatic stress disorder inversely associated with good health?: a report from the Vietnam Era Twin (VET) Registry
Magruder K.M., Eisen S., True W., Fischer M., Goldberg J.

14:45  A twin study of the genetic contribution to age-related functional decline
Gurland B., Page W., Plassman B.
Chair: S. Siribaddana

13:45 A successful model of a North South collaboration
Hotopf M., Hewage S., Siribaddana S.H.

14:03 Twin registers in Asia and Africa
Hur Y.-M.

14:21 The Historimetric Database: A platform for quantifying historical information for twin research
Littvay L., Bearnes B., Fowler J., Neale M.

14:39 Why do we need developing countries to help solve the puzzles of behavioural genetics?
McGuffin P.

14:57 Sri Lankan Twin Registry; Challenges, barriers and lessons learnt
Sumathipala A., Siribaddana S.H.

15:15 Closing Ceremony

Overview Social Program

Thursday, June 7, 2007
Reception at the Congress hall “Het Pand” on the occasion of the 43rd anniversary of the East-Flanders Prospective Twin Survey
(18h00-20h00)

Friday, June 8, 2007
Get-together Reception  City Hall
(18h30-20h30)

Saturday, June 9, 2007
Congress Dinner in historic venue of Ghent
(20h00-23h00)