

Madrid NOVEMBER 2017
Spain 16th · 18th

Twins 2017

The Joint 4th World Congress on Twin Pregnancy
a Global Perspective & The 16th Congress of the International Society
of Twin Studies (ISTS)

www.twinscongress.eu



POWERD BY 



Via Ambrogio Binda, 
Milan, Italy

www.mcascientificevents.eu | info@mcascientificevents.eu

INTERNATIONAL PROGRAMME COMMITTEE

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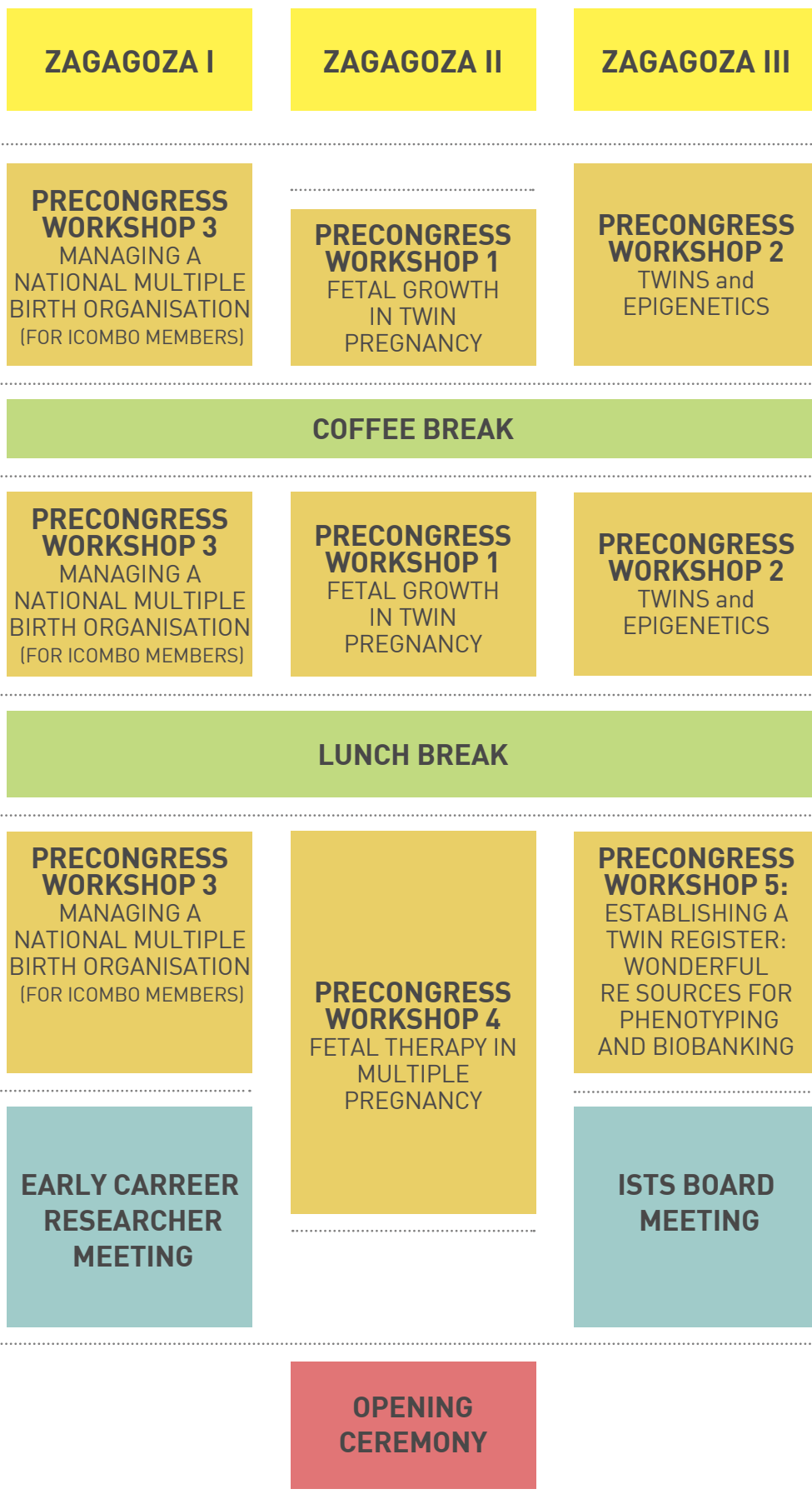
GONNEKE WILLEMSSEN (The Netherlands)

INVITED SPEAKERS

 
Eugenia Antolin (Spain)
Aris Antsaklis (Greece)
Birgit Arabin (Germany)
Diogo Ayres De Campos (Portugal)
Susan Bailey (United States)
Ragnhild Bang Nes (Norway)
Jon F. Barrett (Canada)
Meike Bartels (The Netherlands)
Bart Baselmans (The Netherlands)
Jordanna Bell (United Kingdom)
Mar Bennisar (Spain)
R. Berkhout (The Netherlands) 
Katia Bilardo (The Netherlands)
Isaac Blickstein (Israel)
Linda Booi (Canada)
Dorret Boomsma (The Netherlands)
Despina Briana (Greece)
Isabelle Budin-Ljøsne (Norway)
Lucas Calais Ferreira (Australia)
Elena Carnero Montoro (United Kingdom)
Ramen Chmait (United States)
Kaare Christensen (Denmark)
Lucia Colodro Conde (Australia)
Baptiste Couvy-Duchesne (Australia)
Maria De La Calle (Spain)
Catherine Derom (Belgium)

Danielle  (United States)
Lisbeth D  (United States)
Fabio Facchinetti (Italy)
Renè Frydman (France)
Irene Giardina (Italy)
Maria Del Mar Gil Mira (Spain)
Jack Goldberg (United States)
Jouke Jan Hottenga (The Netherlands)
Corinne Hubinont (Belgium)
Aline Jelenkovic (Finland)
Jaakko Kaprio (Finland)
Mark Kilby (United Kingdom)
Eftichia Kontopoulos (United States)
Nils Lambalk (The Netherlands) 
Liesbeth Lewi (Belgium) 
Robert Lyle (Norway)
Ariadne Malamitsi-Puchner (Greece)
Nicky Manning (United Kingdom)
Nick Martin (Australia)
Hamdi Mbarek (The Netherlands)
Sara Medland (Australia)
Anton Mikhailov (Russia)
Amala Nazareth (EAU) 
J.C. Nijhuis (The Netherlands) 
Veronika Odintsova (Russia)
Miina Ollikainen (Finland)


Juan Ramon Ordonana (Spain)
Henrike Peters (The Netherlands)
Inge Petersen (Denmark)
Liona Poon (Hong Kong)
Ruben Quintero (United States) 
Monica Rankin (Australia) 
Bruno Reversade (Singapore)
Roberto Romero (United States)
Nancy Segal (United States)
Lali Sichinava (Russia)
Eline Slagboom (The Netherlands)
Nicolas Smith (United States)
Tim Spector (United Kingdom)
Claudio Stern (United Kingdom)
Claire Steves (United Kingdom)
Joohon Sung (South Korea)
Qihua Tan (Denmark)
Erik Turkheimer (United States)
Jenny van Dongen (The Netherlands)
Jeanine Van Klink (The Netherlands)
Manuela Veglia (Italy)
Lianne Verbeek (The Netherlands)
Gerard Visser (The Netherlands)
Liliana Voto (Argentina)
Miroslaw Wielgos (Poland)



THURSDAY, NOVEMBER 16TH

20.00



09.30 - 12.30

**PRECONGRESS WORKSHOP 1:
FETAL GROWTH IN TWIN PREGNANCY | ZARAGOZA II ROOM**

Coordinators: Kurt Hecher (Germany); Asma Khalil (United Kingdom)

Discussants: Kurt Hecher (Germany); Asma Khalil (United Kingdom); Isaac Blickstein (Israel); Liesbeth Lewi (Belgium); Gerard H.A Visser (The Netherlands)



09.30 - 09.50

How to monitor intrapartum?

Diogo Ayres De Campos (Portugal)

09.50 - 10.10

How to assess fetal growth in multiple pregnancy?

Isaac Blickstein (Israel)

10.10 - 10.30

Discordance in twins: is it ominous sign?

Asma Khalil (United Kingdom)

10.30 - 11.00

COFFEE BREAK

11.00 - 11.20

Selective fetal growth restriction: definition and outcome

Kurt Hecher (Germany)

11.20 - 11.40

Selective fetal growth restriction: management options

Mar Bannasar (Spain)

11.40 - 12.00

Selective fetal growth restriction: when and how to deliver

Liesbeth Lewi (Belgium)

12.00 - 12.30

Discussion

09.00 - 12.30

**PRECONGRESS WORKSHOP 2:
TWINS AND EPIGENETICS | ZARAGOZA III ROOM**

Coordinators: Jordana Bell (United Kingdom); Miina Ollikainen (Finland)

09.00 - 10.00

The heritability of DNA methylation and links to human traits: Insights from twin studies

Jenny Van Dongen (The Netherlands)

10.00 - 10.30

Epigenome-wide analysis of DNA methylation using monozygotic twins discordant for epilepsy

Namitha Mohandas (Australia)

10.30 - 11.00

COFFEE BREAK

11.00 - 11.30

Epigenetic studies of twins: insights into nonshared environment

Jeff Craig (Australia)



11.30 - 12.00

Environmental effects on epigenetic variability in twins

Elena Carnero Montoro (United Kingdom)

12.00 - 12.30

Discussion

10.00– 16.00

**PRECONGRESS WORKSHOP 3:
MANAGING A NATIONAL MULTIPLE BIRTH ORGANISATION
(FOR ICOMBO MEMBERS) | ZARAGOZA I ROOM**

Coordinator: Monica Rankin (Australia)

10.00 – 10.05

Opening and welcome

Monica Rankin (ICOMBO, Australia)

10.05 – 10.30

**An introduction to the Elizabeth Bryan Multiple Births Centre,
formerly the Multiple Births Foundation**

Jane Denton (Elizabeth Bryan Multiple Births Centre, United Kingdom)

10.30 – 11.00

COFFEE BREAK

11.00 – 11.15

Introduction to ICOMBO members

Monica Rankin (ICOMBO, Australia)

11.15 – 11.45

Purple Butterfly Initiative

Ashlee Tenberge (Australian Multiple Birth Association, Australia)

11.45 – 12.30

**Update on Tamba activities – fetal growth charts; latest findings from
a report on stillbirth, neonatal death, neonatal admissions and patient
safety incidents; Tamba maternity engagement program**

Keith Reed, Amy McCarthy (United Kingdom)

12.30 – 13.30

LUNCH BREAK

13.30 – 14.00

**The diverse families network and their project – Finland for all
families**

Ulla Kumpula (Finnish Multiple Birth Association, Finland)

14.00 – 16.00

Open forum on the following topics:

- Has anyone created a database of twins for different purposes (for advertising, films, research, etc). Is it successful? Any pitfalls?
- How to obtain new/younger members and then retain them
- How to encourage volunteers, not only at the local club level, but at the national level
- How to find quality speakers at a reasonable price, or people who would be willing to donate their services to a non-profit organization
- The structural challenges of building a strong and aligned organisation
- What is your not-for-profit status and how do you access funding?
- Any other topics for discussion? Bring your ideas and suggestions

Closing remarks

13.30 – 17.00

PRECONGRESS WORKSHOP 4:**FETAL THERAPY IN MULTIPLE PREGNANCY | ZARAGOZA II ROOM****Coordinators:** Ruben Quintero (United States); Eugenia Antolin (Spain)

13.30 – 14.05

Expectant management of monoamniotic twins

Ruben Quintero (United States)

14.05 – 14.40

Laser treatment in twin-twin transfusion syndrome

Ramen Chmait (United States)

14.40 – 15.15

Selective fetal reduction in monochorionic twins: indications and techniques

Eugenia Antolin (Spain)

15.15 – 15.50

Neurodevelopmental outcome of monochorionic twins with selective intrauterine growth restriction

Eftichia Kontopoulos (United States)

15.50 – 16.25

The placentation in twins  its challenges**Jose** Louis Bartha (Spain)

16.25 – 17.00

Rethinking TAPS

Ruben Quintero (United States)

13.30 – 16.00

PRECONGRESS WORKSHOP 5: ESTABLISHING A TWIN REGISTER: WONDERFUL RESOURCES FOR PHENOTYPING AND BIOBANKING | ZARAGOZA III ROOM**Coordinator:** Dorret Boomsma (The Netherlands)

13.30 – 13.50

To represent a well-established twin register

Nick Martin (Australia)

13.50 – 14.10

The relatively recent southern EU experience

Juan Ramon Ordonana (Spain)

14.10 – 14.30

The new Moscow newborn twins study experience

Veronika Odintsova (Russia)

14.30 – 14.50

Zygoty assessment from immediate GSA genotyping

Jouke Jan Hottenga (The Netherlands)

14.50 – 15.10

Possibilities for biobanking in twin registers

Eline Slagboom (The Netherlands)

15.10 – 15.30

Providing feedback via a participant portal: experiences from the Netherlands Twin Register

Gonneke Willemsen (The Netherlands)

15.30 – 16.00

Discussion

16:15 - 17.45

ISTS BOARD MEETING | ZARAGOZA III ROOM

Coordinators: Gonneke Willemsen (The Netherlands);
Jennifer R. Harris (Norway)


16:15 - 17.45

EARLY CAREER RESEARCHER MEETING | ZARAGOZA I ROOM

Coordinators: Lucas Calais Ferreira (Australia)

18.00 - 21.00

OPENING CEREMONY & WELCOME RECEPTION | ZARAGOZA III ROOM

Chairpersons: Gian Carlo Di Renzo (Italy), Ruben Quintana (United States);
Jennifer R. Harris (Norway); Jose Luis Bartha (Spain) 

18.00 – 18.15

Opening remarks

The organisers

18.15 – 18.25

The James Shields Award

Presented by: Nick Martin (Australia)

18.25 – 19.05

Opening lecture:

Assessing telomere length and telomerase activity in twin astronauts

Susan Bailey (United States)

The ceremony will be followed by a welcome cocktail that will be held in the exhibition area

	ZAGAGOZA I	ZAGAGOZA II	ZAGAGOZA III
08.30		PARALLEL SESSION 1B PERINATAL MORTALITY AND MORBIDITY IN MULTIPLE PREGNANCY	PARALLEL SESSION 1A WELL-BEING
09.30		KEY NOTE LECTURE TWIN PREGNANCY AND NCDs	
10.00	COFFEE BREAK & POSTER WALK		
11.00	PARALLEL SESSION 2B PRECONCEPTIONAL ASPECTS OF MULTIPLE PREGNANCY	PARALLEL SESSION 2C TWIN-RELATED COMPLICATIONS	PARALLEL SESSION 2A BULMER SESSION ON NEW DEVELOPMENTS WITH THE BIOLOGY OF TWINNING
12.30	LUNCH BREAK & POSTER WALK		
13.30	PARALLEL SESSION 3C HEALTH AND WELL-BEING FOR THE MULTIPLE BIRTH FAMILY	PARALLEL SESSION 3A OBSTETRICAL ISSUES IN TWIN PREGNANCY: PRENATAL SCREENING AND DIAGNOSIS	PARALLEL SESSION 3B EARLY CAREER RESEARCHERS: NETWORK, COLLABORATION AND SCIENCE
15.30	COFFEE BREAK & POSTER WALK		
16.30		PARALLEL SESSION 4A PRETERM BIRTH AND PREMATURITY	PARALLEL SESSION 4B EPIGENOMICS AND TWIN STUDIES
18.30			ISTS GENERAL MEETING
19.30			

08.30 – 09.30

**PARALLEL SESSION 1A:
WELL-BEING | ZARAGOZA III ROOM**

Coordinator: Meike Bartels (The Netherlands)

08.30 – 08.45

Findings from Norwegian twins studies on well-being

Ragnhild Bang Nes (Norway)

08.45 – 09.00

Genome and epigenome findings for well-being

Bart Baselmans (The Netherlands)

09.00 – 09.15

Well-being and the brain

Meike Bartels (The Netherlands)

09.15 – 09.30

Sleep and well-being: quality and duration of sleep relate differently with health-related quality of life

Juan J. Madrid-Valero (Spain)

08.30 – 09.30

**PARALLEL SESSION 1B:
PERINATAL MORTALITY AND MORBIDITY IN MULTIPLE PREGNANCY
| ZARAGOZA II ROOM**

Coordinators: Gerard H.A. Visser (The Netherlands); Aris Antsaklis (Greece)

08.30 – 08.50

Perinatal mortality in twins

Gerard H.A. Visser (The Netherlands)

08.50 – 09.10

How to avoid stillbirth in twins?

Asma Khalil (United Kingdom)

09.10 – 09.30

Single twin demise

Mark Kilby (United Kingdom)

09.30 – 10.00

KEYNOTE LECTURE | ZARAGOZA II ROOM

Introduced by: Gian Carlo Di Renzo (Italy)

**Progesterone for the prevention of preterm birth in twin gestations:
two parallel stories**

Roberto Romero (United States)

10.00 – 10.30

COFFEE BREAK & POSTER WALK WITH FOCUS ON:

- BIOLOGY OF TWINNING
- INFECTIONS AND MATERNAL DISEASES
- MONITORING IN PREGNANCY

10:30 – 12:30

**PARALLEL SESSION 2A:
BULMER SESSION ON NEW DEVELOPMENTS
WITH THE BIOLOGY OF TWINNING | ZARAGOZA III ROOM**

Coordinators: Catherine Derom (Belgium); Nils Lambalk (The Netherlands)

This symposium deals with the biology and genetics of the twinning phenomenon. Name of this symposium: book by Michael Bulmer: "The Biology of Twinning in Man"

10.30 – 10.55

The genetics of dizygotic twinning: the Twinning Genetics Consortium

Hamdi Mbarek (The Netherlands)


10.55 – 11.20

Biology of monozygotic twinning

Claudio Stern (United Kingdom)

11.20 – 11.40

The biology of double implantation of embryos

Robert Berkhout (The Netherlands) 

11.40 – 12.00

Chimerism in DZ twins: an overview and clinical relevance

Henrike Peters (The Netherlands)

12.00 – 12.10

Are monozygotic twins monozygotic?

Catherine Derom (Belgium)

12.10 – 12.20

Monozygotic dizygotic twins are not rare: evidence from a twin birth cohort

Jeff Craig (Australia) 

12.20 – 12.30

GWAS for DZ twinning in a new sample of Australian families

Nick Martin (Australia)

10:30 – 12:30

**PARALLEL SESSION 2B:
PERICONCEPTIONAL ASPECTS OF MULTIPLE PREGNANCY
| ZARAGOZA II ROOM**

Coordinator: Lali Sichinava (Russia); Isaac Blickstein (Israel)

10.30 – 10.50

Twins and socioeconomic parameters

Ariadne Malamitsi-Puchner (Greece)

10.50 – 11.10

Mono- or bi-chorionicity: which does really matter?

Isaac Blickstein (Israel)

11.10 – 11.30

Placental development and complications in twin pregnancy

Josè Louis Bartha (Spain) 

11.30 – 11.50

Customised growth chart in twins

Giuseppe Rizzo, Manuela Veglia (Italy)

11.50 – 12.10

Counselling and techniques for multiple pregnancy reduction

Aris Antsaklis (Greece)

12.10 – 12.30

Discussion

10:30 – 12:30

**PARALLEL SESSION 2C:
TWIN-RELATED COMPLICATIONS | ZARAGOZA I ROOM**

Coordinators: Kurt Hecher (Germany); Gian Carlo Di Renzo (Italy)



10.30 – 10.50

Outcome of complicated twin pregnancy: how to counsel the parents?

Enrico Lopriore (The Netherlands)

10.50 – 11.10

Neurodevelopmental morbidity in monochorionic twins

Kurt Hecher (Germany)

11.10 – 11.30

The placenta in complicated twin pregnancy

Liesbeth Lewi (Belgium)

11.30 – 11.50

Timing of cord clamping

Lianne Verbeek (The Netherlands)

11.50 – 12.10

Twins and neurodevelopmental outcomes: the effect of IVF, fetal growth restriction and preterm birth

Despina Briana (Greece)

12.10 – 12.20

SHORT COMMUNICATION

Birth weight discordance and adverse perinatal outcomes

Shayesteh Jahanfar (United States)

12.20 – 12.30

SHORT COMMUNICATION

Vanished twin: obstetric and perinatal outcomes and association with methylenetetrahydrofolate reductase (MTHFR) polymorphisms(s)

Murat Aykut Ozek (Turkey)

12.30 – 13.30

LUNCH BREAK & POSTER WALK WITH FOCUS ON:

- DELIVERY OF TWINS
- EPIGENOMICS
- PERICONCEPTIONAL ASPECTS OF MULTIPLE PREGNANCY
- WELL-BEING
- POLYGENIC RISK SCORES

13:30 – 15:30

**PARALLEL SESSION 3A:
OBSTETRICAL ISSUES IN TWIN PREGNANCY: PRENATAL SCREENING
AND DIAGNOSIS | ZARAGOZA II ROOM**

Coordinators: Katia Bilardo (The Netherlands); Liona Poon (Hong Kong)

13.30 – 13.50

NIPT in twin pregnancy

Maria Del Mar Gil Mira (Spain)

13.50 – 14.10

Management of discordant anomaly in twin pregnancy

Mark Kilby (United Kingdom)

14.10 – 14.30

First trimester prediction in twin pregnancy

Giuseppe Rizzo, Manuela Veglia (Italy)

- 14.30 – 14.50 **Functional and acquired cardiovascular anomalies in monozygotic twins**
Nicky Manning (United Kingdom)
- 14.50 – 15.10 **Prediction of major obstetrical syndromes in twin pregnancy in first trimester**
Liona Poon (Hong Kong)
- 15.10 – 15.30 **Discussion**
- 13:30 – 15:30** **PARALLEL SESSION 3B:
EARLY CAREER RESEARCHERS: NETWORK, COLLABORATION AND
SCIENCE | ZARAGOZA III ROOM**
Coordinators: Jaakko Kaprio (Finland); Lucas Calais Ferreira (Australia)
- 13.30 – 13.45 **Building networks, capacity and the new workforce in global twin research**
Lucas Calais Ferreira (Australia)
- 13.45 – 14.00 **The CODATwins project: an example of international collaboration in twin research**
Aline Jelenkovic (Finland)
- 14.00 – 14.15 **The career of a staff scientist - combining a scientific background with administrative tasks in a research environment**
Inge Petersen (Denmark)
- 14.15 – 14.30 **Variant anatomy of the circle of Willis: an MRI twin study**
Bianka Forgo (Hungary)
- 14.30 – 14.45 **Is the association between obesity and hip osteoarthritis explained by familial confounding? Results from the Nor-Twin OA study**
Karin Magnusson (Norway)
- 14.45 – 15.00 **The twins research Australia health and lifestyle questionnaire**
Tessa Cutler (Australia)
- 15.00 – 15.30 **Discussion Panel**
- 13:30 – 15:30** **PARALLEL SESSION 3C:
HEALTH AND WELL-BEING FOR THE MULTIPLE BIRTH FAMILY
| ZARAGOZA I ROOM**
Coordinator: Monica Rankin (Australia)
- 13.30 – 13.45 **Mental health and the multiple birth family: antenatal and postnatal groups**
Gretta Little (Australia)
- 13.45 – 14.00 **Single parenting of multiple birth children**
Susan Griffith (United States)

- 14.00 – 14.15 **The multiple birth single parents experiences of their daily lives**
Kristiina Heinonen (Finland)
- 14.15 – 14.30 **The challenges faced by twins, multiples and their families: Experiences in the UK and Australia**
Keith Reed (United Kingdom)
- 14.30 – 14.45 **“What About us?” negotiating the realities of parenting multiples during the first five years**
Laura Maguire (United Kingdom)
- 14.45 – 15.00 **The twins in pedagogical practice**
Klara Vitkova Rulikova (Czech Republic)
- 15.00 – 15.15 **Some aspects of parental support for twins’ education**
Kristiina Heinonen (Finland)
- 15.15 – 15.30 **Discussion**
- 15.30 – 16.30 COFFEE BREAK & POSTER WALK WITH FOCUS ON:
- OTHERS**
- 16.30 – 18.30 PARALLEL SESSION 4A:
PRETERM BIRTH AND PREMATURITY (PREIS School Academy Session)
| ZARAGOZA II ROOM**
Coordinators: Roberto Romero (United States); Luis Cabero Roura (Spain)
- 16.30 – 16.50 **Preterm birth syndrome and its implications for twins**
Roberto Romero (United States)
- 16.50 – 17.10 **Preterm birth in twins: where are we now?**
Jon F. Barrett (Canada)
- 17.10 – 17.30 **Screening for preterm birth in twin pregnancy**
Julien Stirnemann, Yves Ville (France)
- 17.30 – 17.50 **Pessary in twin pregnancy**
Birgit Arabin (Germany)
- 17.50 – 18.10 **New tools for preventing preterm birth**
Fabio Facchinetti (Italy)
- 18.10 – 18.20 **SHORT COMMUNICATION:
Trans abdominal cerclage in twins: series of 7 cases**
Frederic Debieve (Belgium)
- 18.20 – 18.30 **Discussion**

16.30 – 18.30

**PARALLEL SESSION 4B:
EPIGENOMICS AND TWIN STUDIES | ZARAGOZA III ROOM****Coordinators:** Jeffrey Craig (Australia); Robert Lyle (Norway)

16.30 – 16.50

Methylome-wide association study of aggressive behavior in monozygotic twins

Jenny Van Dongen (The Netherlands)

16.50 – 17.10

Hormone replacement therapy - related DNA methylation, gene expression and mir profiles associate with within-pair differences in clinical measures

Miina Ollikainen (Finland)

17.10 – 17.30

A genome-wide profiling of epigenetic fingerprint in adult twins of preterm birth

Qihua Tan (Denmark)

17.30 – 17.50

The relevance of peripheral DNA methylation for human brain development and emotional functioning: studies in monozygotic twins

Linda Booij (Canada)

17.50 – 18.00

Circulating microRNA biomarkers and cognitive function in elderly Danish twins

Jonas Mengel-From (Denmark)

18.00 – 18.10

A twin model for making causal inference: applications to observational epigenetic associations

Shuai Li (Australia)

18.10 – 18.20

Cigarette smoking, circulating levels of immune and inflammatory markers and epigenetics in monozygotic twins

Wendy Cozen (Unites States)

18.20 – 18.30

Epigenetic signatures of prenatal growth control

Marij Gielen (The Netherlands)

18.30 – 19.30

ISTS GENERAL MEETING | ZARAGOZA III ROOM

ZAGAGOZA I

ZAGAGOZA II

ZAGAGOZA III

08.30

PARALLEL SESSION 5A
CARE IN PREGNANCY AND LABOUR

PARALLEL SESSION 5B
POLYGENIC RISK SCORES AND TWIN STUDIES

09.30

KEY NOTE LECTURE
TWIN STUDIES OF OBESITY: AN EPIGENETIC AND MICROBIOME PERSPECTIVE

10.00

COFFEE BREAK & POSTER WALK

10.30

PARALLEL SESSION 6A
SPECIAL ISSUES: TTTS, TAPS, MCMA

PARALLEL SESSION 6B
SYMPOSIUM IN HONOR OF IRV GOTTESMAN

12.30

LUNCH BREAK & POSTER WALK

13.30

PARALLEL SESSION 7A
DELIVERY OF TWINS: CESAREAN DELIVERY, PPH

PARALLEL SESSION 7B
STAKEHOLDER ENGAGEMENT-BUILDING BRIDGES BETWEEN RESEARCHERS AND THE TWIN COMMUNITY

15.30

COFFEE BREAK & POSTER WALK

16.30

ICOMBO BUSINESS MEETING

PARALLEL SESSION 8A
SPECIAL ISSUES: TWINS AND MATERNAL DISEASES

PARALLEL SESSION 8B
THE USE OF TWINS IN UNRAVELLING THE MICROBIOME

18.30

CLOSING REMARKS

SATURDAY, NOVEMBER 18TH

FRIDAY, NOVEMBER 17TH

08.30 – 09.30

**PARALLEL SESSION 5A:
CARE IN PREGNANCY AND LABOUR | ZARAGOZA II ROOM****Coordinator:** Asma Khalil (United Kingdom);
Eftichia Kontopoulos (United States)

08.30 – 08.50

Fetal growth restriction in twin pregnancy

Mar Bennasar (Spain)

08.50 – 09.10

Intrapartum care in twin pregnancy

Gerard H.A. Visser (The Netherlands)

09.10 – 09.30

Can 3D printing help for the monitoring of twin pregnancy?

Irene Giardina, Graziano Clerici, Gian Carlo Di Renzo (Italy)

08.30 – 09.30

**PARALLEL SESSION 5B:
POLYGENIC RISK SCORES AND TWIN STUDIES | ZARAGOZA III ROOM****Coordinator:** Sarah Medland (Australia)

08.30 – 08.50

Construction and use of PRS

Sarah Medland (Australia)

08.50 – 09.10

PRS and the study of GxE interactions

Lucia Colodro Conde (Australia)

09.10 – 09.30

PRS in Mendelian Randomization

Baptiste Couvy-Duchesne (Australia)

09.30 – 10.00

KEYNOTE LECTURE | ZARAGOZA II ROOM**Introduced by:** Jennifer R. Harris (Norway)**Twin studies of obesity: an epigenetic and microbiome perspective**

Jordana Bell (United Kingdom)

10.00 – 10.30

**COFFEE BREAK & POSTER WALK WITH FOCUS ON:
- SPECIAL ISSUES: TTTS, TAPS, MCMA**

10.30 – 12.30

**PARALLEL SESSION 6A:
SPECIAL ISSUES: TTTS, TAPS, MCMA | ZARAGOZA II ROOM****Coordinators:** Ruben Quintero (United States); Mark Kilby (United Kingdom)

10.30 – 10.50

Management of MCMA twins

Kurt Hecher (Germany)

10.50 – 11.10

TTTS in triplets

Asma Khalil (United Kingdom)

11.10 – 11.30

Debate: Traditional selective laser photocoagulation of communicating vessels (SLPCV) approach for managing TTTS

Ruben Quintero (United States)

11.30 – 11.50

Brain abnormalities

Julien Stirnemann (France)

11.50 – 12.10

Long term neurodevelopmental outcome of MC twins

Jeanine Van Klink (The Netherlands)

12.10 – 12.20

SHORT COMMUNICATION

Fetoscopic laser photocoagulation in twin-to-twin transfusion syndrome

Kristina Gladkova (Russia)

12.20 – 12.30

Discussion

10:30 – 12:30

PARALLEL SESSION 6B:

SYMPOSIUM IN HONOR OF IRV GOTTESMAN | ZARAGOZA III ROOM

Coordinator: Nancy Segal (United States)

Discussant: Kaare Christensen (Denmark)

Dr. Irving I. Gottesman was a pioneer in the field of twin research, as well as a wonderful colleague, mentor and friend to the scores of individuals with whom he worked. This symposium honors his legacy and in doing so keeps it alive as an inspiration for future investigators. An overview of his professional contributions and papers from his former students and colleagues will be presented, followed by comments from the audience.

10.30 – 10.35

Introductory remarks

Nancy Segal (United States)

10.35 – 11.55

Gene-environment correlations affecting children's early delinquency and aggressive play behaviors

Lisabeth Dilalla, David Dilalla (United States)

10.55 – 11.15

From genes to behavior through sex hormones and socialization: the example of gender development

Sheri Berenbaum, Adriene M. Beltz (United States)

11.15 – 11.30

Twins reared apart: the Findings behind the fascination

Nancy Segal (United States)

11.30 – 11.50

Irv Gottesman and the possibilities for theoretical behavioral genetics

Eric Turkheimer (United States)

11.50 – 12.10

Mapping risk from genes to behavior

Danielle Dick (United States)

12.10 – 12.20

Discussant

Kaare Christensen (Denmark)

12.20 – 12.28

Comments and recollections from the audience

12.28 – 12.30

Closing Comments

Nancy Segal (United States)

12.30 – 13.30

LUNCH BREAK & POSTER WALK WITH FOCUS ON:

- PERINATAL MORTALITY AND MORBIDITY IN MULTIPLE PREGNANCY
- PRENATAL SCREENING AND DIAGNOSIS IN TWINS PREGNANCY

13.30 – 15.30


PARALLEL SESSION 7A:**DELIVERY OF TWINS: CESAREAN DELIVERY, PPH**  **ZARAGOZA II ROOM****Coordinators:** Gerard H.A. Visser (The Netherlands); Jon F. Barrett (Canada)

13.30 – 13.50

When is the optimal timing to deliver uncomplicated twins?

Jon F. Barrett (Canada)

13.50 – 14.10

Mode of deliveryAmala Nazareth (EAU) 

14.10 – 14.30

Induction of labour in twins

Maria De La Calle (Spain)

14.30 – 14.50

Prevention and management of PPH in multiple pregnancy

Anton Mikhailov (Russia)

14.50 – 15.20

Debate: all monochorionic twins should be delivered by CS**YES:** Corinne Hubinont (Belgium)**NO:** Jan G. Nijhuis (The Netherlands)

15.20 – 15.30

Discussion

13.30 – 15.30

PARALLEL SESSION 7B:**PARTICIPANT ENGAGEMENT AND USER INVOLVEMENT IN TWIN RESEARCH: LET'S TALK ABOUT LESSONS LEARNED AND IDEAS GOING FORWARD | ZARAGOZA III ROOM****Coordinators:** Jennifer R. Harris (Norway); Monica Rankin (Australia); Jeffrey Craig (Australia)

Research funding agencies are increasingly focused on participant engagement and user involvement in the research process to help improve the quality and usefulness of the research.

What are the types of participant engagement and/or user involvement that twin studies have used and how have these helped in the research process? This session will include several short talks describing experiences and approaches with user involvement and engagement in twin studies. It is designed as an interactive session that will include a panel discussion.

13.30 – 13.35

Background for this session

Jennifer R. Harris (Norway)

13.35 – 13.50

User involvement and participant engagement

Jennifer R. Harris (Norway); Isabelle Budin-Ljøsne (Norway)

13.50 – 14.05

Strategies for participant engagement and lessons learned from ICOMBO

Monica Rankin (Australia)

- 14.05 – 14.20 **Vietnam era registries: Engagement through focus groups**
Nicolas Smith (United States)
- 14.20 – 14.35 **Engaging with twins and their families – an Australian perspective**
Jeff Craig (Australia) 
- 14.35– 14.50 **Consent and feedback: Issues and solutions**
Gonneke Willemsen (The Netherlands)
- 14.50 – 15.30 **Discussion Panel**
Isabelle Budin-Ljøsne (Norway); Thalia Eley (United Kingdom);
Jeff Craig (Australia); Jack Goldberg (United States); Monica Rankin (Australia) 
Nancy Segal (United States); Nicolas Smith (United States);
Gonneke Willemsen (The Netherlands)
- 15.30 – 16.30** **COFFEE BREAK**
- PRETERM BIRTH AND PREMATURITY
- TWIN-RELATED COMPLICATIONS
- 16.30 – 18.30** **PARALLEL SESSION 8A:**
SPECIAL ISSUES: TWINS AND MATERNAL DISEASES
| ZARAGOZA II ROOM
Coordinators: Liesbeth Lewi (Belgium), Jan G. Nijhuis (The Netherlands)
- 16.30 – 16.50 **Insulin resistance and metabolic abnormalities in birthweight discordant twins**
Iwona Szymusik, Mirosław Wielgos (Poland)
- 16.50 – 17.10 **SHORT COMMUNICATION**
Gestational diabetes and multiple pregnancy – A 10 year retrospective of obstetric complications and neonatal outcomes
Filipa Mendes Coutinho (Portugal)
- 17.10 – 17.30 **Maternal morbidity according to chorionicity**
Mark Kilby (United Kingdom)
- 17.30 – 17.50 **The ELABELA-nergic pathway as a therapeutic window for pre-eclampsia**
Bruno Reversade (Singapore)
- 17.50 – 18.10 **Thrombophilia and twin pregnancy**
Liliana Voto (Argentina)
- 18.10 – 18.30 **Discussion**

16.30 – 18.30

**PARALLEL SESSION 8B:
THE USE OF TWINS IN UNRAVELLING THE MICROBIOME
| ZARAGOZA III ROOM**

Coordinator: Tim Spector (United Kingdom)

16.30 – 16.55

Irritable Bowel Syndrome, anxiety and gut microbiome - the korean healthy twin study

Joohon Sung (South Korea)

16.55 – 17.20

Novel twin microbiome studies in twins UK

Claire Steves (United Kingdom)

17.20 – 17.40

Differences in fecal microbiota in long-term hodgkin lymphoma survivors and their unaffected twins

Wendy Cozen (United States)

17.40 – 18.00

Cognitive performance is associated with the gut microbiota of community dwelling ageing adults

Serena Verdi (United Kingdom)

18.00 – 18.30

Discussion

16.30 – 18.30

ICOMBO BUSINESS MEETING | ZARAGOZA I ROOM

18.30 – 18.45

ISTS PRIZES AND CLOSING REMARKS | ZARAGOZA II ROOM

ISTS Award presentations:

- The Gedda Prize for best student poster
- The Galton Prize for best student presentation

Closing Remarks

GENERAL INFORMATION

CONFERENCE VENUE

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Calle de Juan Ignacio Luca de Tena, 36, 28027
Madrid, Spain



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POSTER LIST

- ID 4** **HERITABILITY OF BIRTH SIZE: A POOLED INDIVIDUAL-BASED ANALYSIS OF GLOBAL GEOGRAPHICAL DIFFERENCES USING CODATWINS PROJECT**
Y. Yokoyama for the CODATwins Project
- ID 5** **ASSOCIATION OF CERVICAL LENGTH CHANGE AFTER INITIAL INDUCTION OF LABOR WITH SUBSEQUENT SUCCESSFUL INDUCTION IN TWINS**
S. Yi Kook; K. Hoon Park; S. Jeong Jeon; H. soo Park; H-N. Yoo
- ID 10** **THE EVERYDAY EXPERIENCES OF FINNISH MULTIPLE-BIRTH SINGLE PARENTS**
K. Heinonen
- ID 12** **PRENATAL OUTCOMES AND BIRTH WEIGHT DISCORDANCE, A SYSTEMATIC REVIEW**
S. Jahanfar
- ID 14** **TRIPLETS –TRIPLE COMPLICATION (CASE REPORT)**
N. Vedmedovska; A. Miskova; V. Fodina
- ID 15** **TWIN PREGNANCY WITH NEURAL TUBE DEFECTS AND TWIN-TO-TWIN TRANSFUSION SYNDROME-CASE REPORT**
V. Dascau; G. Furau; C. Furau; C. Onel; C. Stanescu; L. Tataru
- ID 16** **TWIN PREGNANCY DISCORDANT FOR SIRENOMELIA-CASE REPORT**
V. Dascau; G. Furau; C. Furau; C. Onel; C. Stanescu; L. Tataru
- ID 19** **RAPID CERVICAL PHIGFBP-1 TEST IN ASYMPTOMATIC TWIN PREGNANCIES IN PREDICTION OF PRETERM DELIVERY**
K. Kosinska-Kaczynska; I. Szymusik; D. Bomba-Opon; A. Zygula; M. Wielgos
- ID 21** **PROTON PUMP INHIBITOR USE AND RISK OF COGNITIVE DECLINE: A FOLLOW-UP TUDY OF MIDDLE AGED AND ELDERLY TWINS**
M. Wod; J. Hallas; K. Andersen; L. A. García Rodríguez; K. Christensen; D. Gaist
- ID 23** **COMPARISON OF PLANNED CESAREAN DELIVERY AND PLANNED VAGINAL DELIVERY IN WOMEN WITH A TWIN PREGNANCY: A NATION WIDE COHORT STUDY**
S. Goossens; S. Ensing; M. van der Hoeven; F. Roumen; J. Nijhuis; B. Mol
- ID 26** **SINGLE INTRAUTERINE DEATH IN TWINS: THE IMPORTANCE OF FETAL ORDER**
P. Ward; K. Reidy; R. Palma-Dias; L. Doyle; M. Umstad
- ID 27** **CASE REPORT OF QUINTUPLET PREGNANCY IN UKRAINE**
S. Galych; S. Shevchenko; V. Fusun; V. Yanak
- ID 31** **DICHORIONIC TWINS PREGNANCY DISCORDANT FOR FETAL ANENCEPHALY**
S. Kumru; C. Etlec
- ID 33** **HUMOR AND BORDERLINE PERSONALITY**
B.E. Atkinson; J.A. Schermer; R.A. Martin; N.G. Martin; M.T. Lynskey; T.J. Trull; P.A. Vernon
- ID 35** **CLINICAL OUTCOME AND PLACENTA CHARACTERISTICS OF SPONTANEOUS TWIN ANEMIA POLYCYTHEMIA SEQUENCE**
W. Xueju
- ID 38** **LONELY PEOPLE TEND TO MAKE FUN OF THEMSELVES**
J. Aitken Schermer; R.A. Martin; P.A. Vernon; N.G. Martin; L. Colodro Conde; D. Statham; M.T. Lynskey
- ID 39** **A BEHAVIOR GENETIC INVESTIGATION OF THE RELATIONSHIP BETWEEN VOCATIONAL INTERESTS AND MEASURED INTELLIGENCE**
J. Aitken Schermer; P.A. Vernon; A.M. Johnson
- ID 41** **APLASIA CUTIS CONGENITA AS A RESULT OF INTERSTITIAL LASER THERAPY FOR FETAL REDUCTION IN MONOCHORIONIC TWINS: CONSERVATIVE APPROACH AND OUTCOME**
V. Mugarab Samedi; A. Lodha; A. ElSharkawy; A. Samedi; E. Al Awad
- ID 42** **IMPACT OF A “BREECH CLINIC” ON THE MODE OF DELIVERY OF TWIN PREGNANCIES**
E. Costa; S. Zaytouni; V. Bogne; S. Derisbourg; C. Daelemans
- ID 43** **SMOKING DURING PREGNANCY, TELOMERE LENGTH IN PLACENTAL TISSUE AND INTELLIGENCE DURING CHILDHOOD**
E.M. Bijmens; C. Derom; E. Thiery; S. Weyers; T.S. Nawrot
- ID 44** **OBSTETRIC AND PERINATAL OUTCOME OF MULTIPLE PREGNANCIES AFTER IN VITRO FERTILIZATION COMPLICATED BY SEVERE OVARIAN HYPERSTIMULATION SYNDROME**
N. Abián Franco; B. Gastón Moreno; S. García Francés; B. Pérez Munárriz; C. Larrañaga Azcárate; J. Zabaleta Juríotriz
- ID 45** **SUPERNUMERARY GESTATIONS AFTER DISCORDANT NUMBER OF EMBRYOS TRANSFERRED**
N. Abián Franco; B. Gastón Moreno; B. Pérez Munárriz; S. García Francés; M. Ruiz García; I. Zabaleta Loinaz; C. Larrañaga Azcárate; J. Zabaleta Jurío
- ID 46** **MATERNAL AND OBSTETRIC COMPLICATIONS IN TRIPLET PREGNANCIES: SINGLE-CENTER EXPERIENCE**
N. Abián Franco; B. Gastón Moreno; B. Pérez Munárriz; S. García Francés; J. Barrenetxea Arrinda; I. Pedroarena Lecumberri; M. Bazán Legasa; C. Larrañaga Azcárate; J. Zabaleta Jurío
- ID 48** **THE SIGNIFICANCE OF YOLK SAC NUMBER IN MONOAMNIOTIC TWINS**
C. Fenton; K. Reidy; M. Demyanenko; R. Palma-Dias; S. Cole; M. P. Umstad
- ID 49** **TWIN PREGNANCIES IN FINLAND IN 1987-2014 – TRENDS AND CHANGES IN PREGNANCY COMPLICATIONS**
A-R. Rissanen; R. Jernman; G. Mika; N. Irmeli; N. Mika
- ID 51** **BIRTH WEIGHT DISCORDANCE AND LONG TERM OUTCOMES: A SYSTEMATIC REVIEW AND META-ANALYSIS**
S. Jahanfar; J.M. Craig; A. Khalil; S. Hassan
- ID 52** **HERITABILITY OF SUBFERTILITY AMONG DANISH MALE AND FEMALE TWINS**
L. Juel Ahrenfeldt; S. Möller; T. Kold Jensen; K. Christensen; R. Lindahl-Jacobsen

- ID 53** **ALTERED ANTIBODY RESPONSE TO EPSTEIN-BARR VIRUS IN PATIENTS WITH RHEUMATOID ARTHRITIS AND HEALTHY SUBJECTS PREDISPOSED TO THE DISEASE**
A.J. Svendsen; M.C. Wulff Westergaard; A. Holck Draborg; R. Holst; K.O. Kyvik; P. Junker; M.A. Jakobsen; G. Houen
- ID 55** **ARABIN OBSTETRIC PESSARY TO PREVENT PRETERM DELIVERY IN TWIN PREGNANCIES**
M. Benito Vielba; A. Agustín Oliva; A. Espiau Romera; E.L. Tejero Cabrejas; C. De Bonrosto Torralba; J.M. Campillos Maza
- ID 59** **ARE MONOZYGOTIC TWINS REALLY GENOTYPICALLY IDENTICAL?**
I. Szymusik; K. Kosinska-Kaczynska; S. Kozlowski; R. Brawura Biskupski Samaha
- ID 60** **GENETIC AND ENVIRONMENTAL ASSOCIATIONS BETWEEN SELF-EFFICACY, FATIGUE AND DEPRESSION**
F. Inui; K. Silventoinen; C. Honda; R. Tomizawa; N. Sakai; K. Nakatani; D. Matsumoto; K. Kato; Osaka Twin Research Group
- ID 61** **RELATIONSHIP BETWEEN OBSTRUCTIVE SLEEP APNEA AND LUMBAL DISC PROTRUSION: A TWIN STUDY**
A. Domonkos Tarnoki; D. László Tárnoki; M. Szily; D. Tamás Kovács; B. Forgó; M.B. Pinheiro; P. Ferreira; L. Kostyál; C. Oláh
- ID 63** **THE BIG 5 OF TWINS' RELATIONSHIPS**
H. Segal; A. Knafo-Noam
- ID 67** **INTERPERSONAL RELATIONSHIP IN TWINS AND ASSOCIATED FACTORS IN THEIR CHILD CARE**
S. Fukuda; Y. Yokoyama
- ID 70** **ANTITHROMBOTIC MANAGEMENT AND PERINATAL OUTCOME IN WOMEN WITH MULTIPLE PREGNANCIES AND THROMBOPHILIA**
B. Grand; M. Arana; L. Voto. Obstetric Team; F. Sobral; M. Horton; S. Papier; G. Leguizamon; S. Kopelman; M. González Alcantara; L. Otaño; M. Sebastiani; A. Trepát; I. Uranga; F. Del Giudice; F. Neuspiller
- ID 71** **ULTRASOUND DETECTION OF PROXIMATE UMBILICAL CORD INSERTIONS (PCIS) IN MONOCHORIONIC TWIN PREGNANCIES. CASE STUDY**
T.A. Yarygina; A.A. Klassen; E.V. Trifonova; R.S. Bataeva
- ID 72** **THE RELATIONSHIP OF PHYSICAL HEALTH TO MENTAL HEALTH IN THE VIETNAM ERA TWIN STUDY OF AGING (VETSA)**
M. Lyons; M. Logue; R. McKenzie; R. Toomey; M. Panizzon; C. Franz; W. Kremen
- ID 73** **THE EVALUATION OF DISCORDANCE IN TWINS WITH SPECIFIC AND NON-SPECIFIC PATHOLOGY BY MEASUREMENTS OF LIVER, THYROID GLAND AND KIDNEYS**
I. Gordienko; O. Tarapurova; G. Grebinichenko; A. Velichko
- ID 76** **THE UMBILICAL CORD PATHOLOGY – THROMBOSIS OF THE UMBILICAL CORD - CASE REPORT**
V. Djokvucic; S. Srzentic; Z. Srzentic
- ID 77** **THE ELIZABETH BRYAN MULTIPLE BIRTHS CENTRE**
M. Harvey; J. Denton; L. Clifford; L. Mcgrath-Scott
- ID 79** **A TWIN STUDY OF THE COMMON GENETIC AND ENVIRONMENTAL INFLUENCES BETWEEN MOTOR CONTROL AND ADHD SYMPTOMS**
A. Ogliari; C. Fagnani; E. Pezzica; R. Belotti; E. Medda; G. Baud-Bovy; M. Battaglia; M. Antonietta Stazi
- ID 82** **A GENOME WIDE ASSOCIATION STUDY IDENTIFYING A GENETIC VARIANT FOR FRAILTY USING THE TWINSUK COHORT**
S. Verdi; R. Cheesman; R. Ce Bowyer; M. Mangino; T.D. Spector; C.J. Steves
- ID 84** **ACCEPTANCE OF VAGINAL MODE OF DELIVERY IN TRIPLET PREGNANCIES**
A. Kesrouani; E. Choueiry; I. Hatoum; B. Nasr; H. Atallah; R. Finan
- ID 85** **ISOLATED ECTOPIA CORDIS IN A TWIN FETUS: A CASE REPORT**
H. Atallah; C. Bou Saba; L. Daou; A. Germanos; A. Kesrouani
- ID 86** **THORAGOPAGUS TWINS IN A TRIPLET PREGNANCY: A CASE REPORT**
A. Kesrouani; I. Hatoum; B. Nasr; H. Atallah; S. Maalouf; R. Finan
- ID 87** **COMPARING AMNIOTIC FLUID ECHOGENICITY IN MULTIPLE PREGNANCY WITH IUGR**
A. Kesrouani; E. Choueiry; I. Hatoum; E. Chalhoub; B. Nasr; E. Attieh; R. Finan
- ID 88** **ESTABLISHING A TWIN REGISTER: WONDERFUL RESOURCES FOR PHENOTYPING AND BIOBANKING**
D.I. Boomsma
- ID 92** **INFANT MORTALITY RATES AMONG ZYGOTIC TWINS AND RISK FACTORS: BIRTH WEIGHT DISCORDANCE AND CAUSE OF DEATHS IN JAPAN, 1995-2008**
Y. Imaizumi
- ID 94** **GIRLS VERSUS BOYS- A TWO YEAR FOLLOW-UP IN A SET OF QUADRUPLETS**
A. Craciun; A. Stanescu; S. Dumitru; A. Filipescu; M. Stocklosa
- ID 95** **50 YEARS OF TWIN RESEARCH IN AUSTRALIA**
N.G. Martin
- ID 96** **AN ITALIAN TWIN STUDY ON GENDER DIFFERENCES IN ADULTS' EMPATHY HERITABILITY**
V. Toccaceli; C. Fagnani; M. Ferri; N. Eisenberg; G. Alessandri; A. Vitale; M.A. Stazi
- ID 99** **SLEEP QUALITY AND EMOTIONAL SELF-REGULATION IN ADOLESCENCE**
E. Medda; C. Fagnani; G. Alessandri; D. Delfino; A. Arnofi; C. Violani; C. D'ippolito; S. Alviti; M.A. Stazi
- ID 100** **TWIN PREGNANCIES AND ANEMIA - Case Report**
M. Vusurovic; R. Nikitovic; V. Njezic
- ID 101** **TAPS WITH sIUGR. A NEW ENTITY?**
M. Tavares de Sousa; A. Fonseca; K. Hecher

- ID 102** **OBJECTIVELY MEASURED PHYSICAL ACTIVITY PROFILE AND COGNITION IN FINNISH ELDERLY TWINS**
P. Iso-Markku; K. Waller; E. Vuoksima;
H. Vähä-Ypyä; N. Lindgren; K. Heikkilä; H. Sievänen;
J. Rinne; J. Kaprio; U.M. Kujala
- ID 103** **A RARE CASE OF AMNIOTIC FLUID DISCORDANCE IN DICHORIONIC TWINS**
A. Fonseca; M. Tavares De Sousa; K. Hecher
- ID 104** **FIRST EXPERIENCE IN SELECTIVE FETAL TERMINATION IN MONOCHORIONIC TWIN PREGNANCIES BY BIPOLAR CORD COAGULATION IN SERBIA**
V. Mandic Markovic; Z. Mikovic; D. Filimonovic;
N. Cerovic
- ID 105** **PERINATAL OUTCOME OF TRIPLET PREGNANCIES: SINGLE-CENTER EXPERIENCE**
N. Abián Franco; B. Gastón Moreno;
S. García Francés; B. Pérez Munárriz;
A. E. Safont Gascón; M. Ruiz García;
I. Zabaleta Loinaz; C. Larrañaga Azcárate;
J. Zabaleta Jurío
- ID 106** **CHANGES IN GENETIC AND ENVIRONMENTAL INFLUENCES ON ARTERIOSCLEROTIC TRAITS: A LONGITUDINAL TWIN STUDY**
A. Domonkos Tarnoki; C. Fagnani; E. Medda;
D. Laszlo Tarnoki; B. Fejer; P. Maurovich-Horvat;
M. Ferri; G. Pucci; P. Lucatelli; C. Baracchini;
M.A. Stazi
- ID 107** **BIRTHWEIGHT DISCORDANCE IN TWINS – WHAT IS THE PROGNOSTIC VALUE IN THE ABSENCE OF FETAL GROWTH RESTRICTION?**
J. Lyra; C. Melo; T. Costa-Castro; H. Gonçalves;
C. Ramalho; N. Montenegro
- ID 108** **TWIN REVERSED ARTERIAL PERFUSION (TRAP) SEQUENCE: THREE CASES OVER ONE YEAR**
J. Lyra; T. Costa-Castro; T. Ferraz; C. Ramalho;
N. Montenegro
- ID 109** **THE GENETIC MECHANISM BEHIND THE DIETARY FAT INFLUENCE ON FAT TASTE. A TWIN STUDY**
D. Liu; A. Costanzo; N.S. Archer; C. Nowson;
K. Duesing; R. Keast
- ID 110** **NEURODEVELOPMENTAL OUTCOME OF MONOCHORIONIC TWINS WITH SELECTIVE INTRAUTERINE GROWTH RESTRICTION USING THE BATTLE DEVELOPMENTAL INVENTORY-2**
R. Quintero; R.H. Chmait; E. Kontopoulos;
M.E. Williams; J. Sloop; C. Pena-Ricardo; L.M. Korst;
D. Vanderbilt
- ID 112** **TWIN ANEMIA POLYCYTHEMIA SEQUENCE (TAPS) IN THE ABSENCE OF PATENT PLACENTAL VASCULAR ANASTOMOSES**
R. Quintero; M. Al-Baloushi; A. Charles;
E. Kontopoulos; J. Konje; K. Najat
- ID 114** **CHARACTERISTICS AND OUTCOME OF TRAP SEQUENCE: A THREE CASE SERIES**
B. Nasr; D.E. Nasr; A. Kesrouani
- ID 117** **LONG-TERM PHYSICAL ACTIVITY AS A PREDICTOR OF LATE LIFE OBJECTIVELY MEASURED MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY, A 40-YEAR LONGITUDINAL TWIN STUDY**
K. Waller; H. Vähä-Ypyä; T. Törmäkangas;
P. Hautasaari; N. Lindgren; P. Iso-Markku;
K. Heikkilä; J.O. Rinne; J. Kaprio; H. Sievänen;
U.M. Kujala
- ID 118** **SIXTH CRANIAL NERVE PALSY AS THE FIRST MANIFESTATION OF PREECLAMPSIA**
B. Gastón; N. Abián; B. Pérez; S. García; A. Safont;
I. Zabaleta; M. Ruiz; I. Pedroarena; C. Larrañaga
- ID 120** **RELATIONSHIP BETWEEN SLEEP AND ANTISOCIAL BEHAVIOR**
J.J. Madrid-Valero; J.R. Ordoñana; S.A. Burt
- ID 121** **GROWTH IN EARLY CHILDHOOD AND WHEEZING AT THREE YEARS: NATURE OR NURTURE?**
S. Brescianini; S. Alviti; A. Arnofi; L. Nisticò; M.A. Stazi
- ID 122** **BIAMNIOTIC BICORIAL TWIN PREGNANCY: CASUAL FINDING OF VASA PREVIA IN FIRST TWIN**
B. Gastón; N. Abián; M. Ruiz; J. Barrenetxea;
I. Zabaleta; M. Bazán; S. García; M. Urtasun;
C. Larrañaga
- ID 123** **THE HIGHER CONCORDANCE RATE OF BILIRUBIN LEVELS OF MONOZYGOTIC TWINS COMPARED TO DIZYGOTIC TWINS**
Y. Kyoung Uhm; S. Mi Lee; C-W. Park; J. Shin Park;
J. Kwan Jun
- ID 124** **IMPROVED PERFORMANCE OF VAGINAL DELIVERY IN TWIN PREGNANCY; 15 YEARS' EXPERIENCE IN SEOUL NATIONAL UNIVERSITY HOSPITAL**
M. Kyoung Kim; S. Mi Lee; C-W. Park; J. Shin Park;
J. Kwan Jun
- ID 125** **TRIPLET PREGNANCIES REVIEW: AN ELEVEN-YEAR EXPERIENCE OF A TERTIARY CARE CENTER IN MADRID, SPAIN**
S. Caballero Sanz; J.I. Ilabaca Salas;
J. Antonio León Luis; L. Riobos Sierra; C.A. Mayo;
F.J. Amor Valera; S. García-Tizón Larroca
- ID 126** **RELATIONSHIP BETWEEN DNA DAMAGE RESPONSE AND METABOLIC PROFILE IN OVERWEIGHT/OBESE INDIVIDUALS**
L. Nisticò; P. Fortini; F. Marcon; V. Guglielmi;
V. Simonelli; S. Laterza; E. Iorio; M. Signore;
C. D'ippolito; M. Salemi; S. Brescianini; C. Ferreri;
P. Sbraccia; M.A. Stazi; E. Dogliotti
- ID 127** **EFFECTS OF RECENT STRESSFUL LIFE-EVENTS ON PRONENESS TO PSYCHOSIS IN AN ITALIAN TWIN SAMPLE**
M. Nobile; C. Fagnani; M. Garzitto; C. Bonivento;
S. Piccin; M. Mauri; E. Maggioni; M. Salemi; A. Arnofi;
V. Toccaceli; M. Bellina; M. Molteni; M.A. Stazi
- ID 128** **INTRA-PAIR BIRTH WEIGHT DIFFERENCES AND BEHAVIOUR PROBLEMS IN PRESCHOOL TWINS**
E.C. Tore; E.E. Antoniou; K. Reed; T.R. Southwood;
L. Smits; J.P. McCleery; M.P. Zeegers
- ID 129** **THE USP TWIN PANEL: CURRENT STATUS AND PROSPECTS FOR BRAZILIAN TWIN STUDIES IN PSYCHOLOGICAL RESEARCH**
M.A. Corrêa Varella; J. Arantes; V. Giampaoli;
E. De Souza Fernandes; T.G. Acquaviva; T. Kiehl Lucci;
S. Corte; N. Gomes; N.L. Segal; F. Leite Ribeiro;
E. Otta
- ID 130** **MANAGEMENT OF A CONSECUTIVE SERIES OF MONOCHORIONIC TWIN PREGNANCIES COMPLICATED BY TWIN ANEMIA- POLYCYTHEMIA SEQUENCE (TAPS) AT A SINGLE CENTER**
M.M. Lanna; S. Faiola; F. Fuse; T. Izzo; M.A. Rustico
- ID 131** **OUR TWO YEARS' EXPERIENCE WITH DIAGNOSTIC WHOLE EXOME SEQUENCING (WES) IN TWINS**
P. Zwijnenburg; Q. Waisfisz; H. Meijers-Heijboer;
H. Gilte; D. Boomsma

- ID 132** **CASE REPORT OF ANTEPARTUM DEATH OF ONE TWIN**
B. Pérez Munárriz; L. Martínez Jimenez;
N. Abian Franco; M. Urtasun Murillo;
S. García Francés ; C. Larrañaga Azcárate
- ID 133** **MORTALITY AND MORBIDITY OF THE SECOND TWIN RELATED WITH DELIVERY MODE**
P. Alonso; V. Domínguez; S. García-Tizón; P. Pintado;
L. Pérez; Y. Cuñarro
- ID 134** **ACADEMIC ACHIEVEMENT OF TWINS BASED ON PLACE OF RESIDENCE AND TYPE OF EDUCATIONAL ESTABLISHMENT**
M. Egorova; Y. Chertkova; A. Fominykh
- ID 138** **THE SIGNIFICANCE OF PLACENTAL CORD INSERTION SITE IN TWIN PREGNANCY**
E. Kalafat; B. Thilaganathan; A. Papageorghiou;
A. Bhide; A. Khalil
- ID 139** **MANAGEMENT DIFFICULTIES IN THE CASE OF A MAJOR MORPHOLOGICAL ABNORMALITY IN ONE OF THE TWINS**
A. Kesrouani; I. Hatoum; E. Choueiry; B. Nasr;
L. Daou; E. Attieh; R. Finan
- ID 140** **NEONATAL AND MATERNAL OUTCOMES IN SPONTANEOUSLY-CONCEIVED TWIN PREGNANCIES ACCORDING TO MODE OF DELIVERY**
S. Mc Kenzie Stancu; M. Cristina Russu
- ID 141** **TRENDS IN THE PREVALENCE OF TWIN PREGNANCIES AND ROUTE OF DELIVERY IN A TERTIARY CARE CENTER IN LEBANON**
A. Kesrouani; I. Hatoum; I. Mallak; N. Aouad;
E. Choueiry; L. Daou; E. Attieh; R. Finan
- ID 143** **THE EFFECTIVENESS OF ARABIN PESSARY IN TWIN PREGNANCY**
O. Bespalova; G. Sargsyan
- ID 144** **INVESTIGATING THE GENETIC BASIS OF SINGING ABILITY: A PILOT ONLINE TWIN STUDY**
Y. Ting Tan; G.E. Mcpherson; I. Peretz; S.F. Berkovic;
S.J. Wilson
- ID 145** **MOST FREQUENT COMPLICATIONS IN TWIN PREGNANCIES – EXPERIENCE OF A PORTUGUESE PUBLIC HOSPITAL**
I. Morais Rodrigues; I. Vermelho Lourenço; H. Gomes;
D. Martins; E. Dias; C. Verissimo
- ID 146** **HERITABILITY OF COLD AND HEAT PATTERNS**
Y-M. Hur; H. Yu; H-J. Jin; S. Lee
- ID 147** **SEX DIFFERENCE IN GENETIC AND ENVIRONMENTAL INFLUENCES ON SOMATIZATION SYMPTOMS**
Y-M. Hur; A. Burri; H-U. Jeong
- ID 148** **LEISURE-TIME PHYSICAL ACTIVITY SHOWS NO EFFECT ON DNA METHYLATION AGE IN DISCORDANT TWIN STUDY**
E. Sillanpää; M. Ollikainen; J. Kaprio; T. Törmäkangas;
U. Kujala
- ID 153** **THE STUDY OF THE RELATIONSHIP BETWEEN HUMAN GUT MICROBIOTA AND BMI FOR JAPANESE TWINS**
N. Matsumoto; C. Honda; K. Hosomi; J. Kunisawa;
K. Akada; M. Watanabe; Y. Iwatani;
Osaka Twin Research Group; R. Tomizawa
- ID 155** **KEY INDICATORS IN MULTIPLE BIRTHS CARE IN THE UK AND THEIR RELATIONSHIP WITH STILLBIRTH AND NEONATAL DEATHS**
E.E. Antoniou; K. Reed; A. Mccarthy; H. Turier;
N. Roberts
- ID 159** **RELATIONSHIP OF LUMBAR DISC PROTRUSIONS WITH MTDNA COPY NUMBER AND TELOMERE LENGTH IN TWINS**
D. László Tárnoki; A. Domanokos Tárnoki; D. Melicher;
A. Illés; A. Falus; M. Judit Molnár; M. Szily;
D. Tamás Kovács; B. Forgó; L. Kostyál; C. Oláh
- ID 160** **SERIAL CERVICAL CONSISTENCY INDEX MEASUREMENTS AND PREDICTION OF PRETERM BIRTH<34 WEEKS IN TWIN PREGNANCIES**
H. Rosen; V. Stratulat; N. Melamed; A. Aviram;
R. Okby; J.F. Barrett; P. Glanc
- ID 161** **SERIAL UTERO-CERVICAL ANGLE MEASUREMENTS AND PRETERM BIRTH<34 WEEKS IN TWIN PREGNANCIES**
H. Rosen; V. Stratulat; N. Melamed; A. Aviram;
R. Okby; J.F. Barrett; P. Glan
- ID 162** **SINGLE MID-TRIMESTER UTERO-CERVICAL ANGLE MEASUREMENT AND PREDICTION OF PRETERM BIRTH IN TWIN PREGNANCIES**
H. Rosen; V. Stratulat; N. Melamed; A. Aviram;
R. Okby; J.F. Barrett; P. Glan
- ID 163** **PREDICTION OF PRETERM BIRTH IN TWIN PREGNANCIES BY SINGLE MID-TRIMESTER CERVICAL CONSISTENCY INDEX MEASUREMENT**
H. Rosen; V. Stratulat; N. Melamed; A. Aviram;
R. Okby; J.F. Barrett; P. Glan
- ID 165** **TWIN REVERSED ARTERIAL PERFUSION SYNDROME - A CASE REPORT OF ACARDIAC FETUS IN MONOCHORIAL- DIAMNIOTIC TWIN PREGNANCY**
J. Pinto; V. Ribeiro; A. Ferreira; V. Mourinha;
D. Almeida
- ID 167** **THE MOSCOW LONGITUDINAL STUDY OF NEWBORN TWINS: PILOT STUDY FINDINGS OF IVF AND NON-IVF GROUP**
V. Odintsova; A. Konoplyannikov; L. Sichinava;
O. Latyshkevich; E. Nurahova; I. Voronina;
I. Airapetian; S. Malykh
- ID 168** **FETAL GROWTH DISCORDANCY IN MULTIPLES**
L. Sichinava; O. Panina; K. Gamsakhurdiya
- ID 170** **ASSOCIATION BETWEEN SMOKING AND DEPRESSION: A LONGITUDINAL INVESTIGATION AMONG TWINS FROM LATE ADOLESCENCE TO YOUNG ADULTHOOD**
A. Ranjit; T. Korhonen; J. Buchwald; K. Heikkila;
A. Tuulio-Henriksson; R.J. Rose; J. Kaprio; A. Latvala
- ID 171** **HOUSEHOLD STRESS INCREASES THE HERITABILITY OF EMOTIONAL EATING IN CHILDHOOD: A GENE-ENVIRONMENT INTERACTION STUDY**
M. Herle; A. Fildes; F. Rijdsdijk; C. Llewellyn
- ID 172** **ON INFORMATIONAL WITHIN-PAIR CORRELATION**
A. Jensen; J. Hjelmborg
- ID 173** **EFFECTS OF PREGNANCY COMPLICATIONS TO OUTCOMES OF TWINS BIRTH**
O. Bespalova; O. Kosyakova

- ID 174** **THORACO-OMPHALOPAGUS CONJOINED TWINS SHARING THEIR HEARTS**
A. Cunha; P. Fell; L. Vieira; H. Filik; G. May; E. Barbosa; G. Albé; G. Sartori; P. Zen; R. Rosa
- ID 175** **TWIN PREGNANCY WITH AN ACARDIC FETUS PRESENTING A CONSERVATIVE MANAGEMENT**
A. Cunha; J. Telles; H. Filik; G. May; E. Barbosa; G. Albé; J. Gonzales; M.A. Ferreira; D. Arenas; P. Zen; R. Rosa
- ID 176** **DIZYGOTIC TWINS CONCORDANT FOR MYELOMENINGOCELE**
A. Cunha; C. Dietrich; V. Petersen; J. Chinelato; F. Altmann; E. Correia; V. Guimarães; R. Rosa; P. Zen; R. Rosa
- ID 177** **MONOZYGOTIC TWINS DISCORDANT FOR CONGENITAL CYSTIC ADENOMATOID MALFORMATION**
A. Cunha; J. Telles; L. Targa; G. Calai; M. Del Maschi; M. Farina Júnior; F. Altmann; L. Beltrão; P. Zen; R. Rosa
- ID 178** **PATTERNS IN ORAL GLUCOSE TOLERANCE TEST – ARE THEY HERITABLE?**
C. Dalgård; S. Möller; K. Ohm Kyvik
- ID 179** **PROVIDING INDIVIDUALISED CARE FOR MULTIPLE BIRTH FAMILIES FROM CONCEPTION - 1 YEAR - DEVELOPMENT OF AN E-LEARNING MODULE FOR HEALTHCARE PRACTITIONERS**
N. Turville; L. Maguire; L. Clifford; L. Mcgrath-Scott
- ID 181** **NEONATAL OUTCOMES IN TWIN PREGNANCIES – 10 YEAR EXPERIENCE IN VAGINAL VS CAESAREAN DELIVERY**
F. Coutinho; I. Ferreira; S. Cabrita; T. Bombas; E. Fonseca; P. Moura
- ID 184** **CHANGES OF EATING BEHAVIORS DURING CHILDHOOD: A STUDY IN TWINS**
C. Ribeiro; A. Oliveira; C. Moreira; E. Ramos
- ID 186** **PERINATAL OUTCOME ACCORDING TO CHORIONICITY IN TWIN PREGNANCY**
Y. Cuñarro López; P. Alonso Ortuño; S. García-Tizón Larroca; I. Cueto Hernández; J.A. De León Luis
- ID 187** **EFFECTIVENESS OF DINOPROSTONE FOR INDUCTION OF LABOUR IN TWINS**
A. Agustín Oliva; M. Benito Vielba; V. Elena Lázaro García; R. Crespo Esteras; J. Manuel Campillos Maza; S. Castán Mateo
- ID 188** **NECROTIZING ENTEROCOLITIS IN TWIN PREGNANCIES: CAN WE FIND A KEY IN PLACENTAL ABNORMALITIES?**
R.R. Aapkes; K.E.A. Hack; C. Koopman-Esseboom; P.G.J. Nikkels; J.B. Derks; H.A.A. Brouwers
- ID 189** **OUTCOME OF THE SECOND TWIN ACCORDING TO INTERTWIN DELIVERY INTERVAL IN DIAMNIOTIC PREGNANCIES: DOES TIME MATTER?**
C. Callegari; P. Algeri; S. Andrea Mastrolia; M. Incerti; S. Cozzolino; V. Giardini; P. Vergani
- ID 190** **NUCHAL TRANSLUCENCY: AN ULTRASOUND PARAMETER FOR OUTCOMES OF MONOCHORIONIC DIAMNIOTIC TWIN PREGNANCIES?**
I. Ferreira; F. Coutinho; S. Cabrita; E. Vasco; P. Moura
- ID 191** **DOES TWIN PREGNANCY IN OLDER WOMEN HAVE THE SAME OUTCOMES AS IN YOUNGER WOMEN?**
I. Ferreira; F. Coutinho; S. Cabrita; E. Vasco; P. Moura
- ID 195** **TRIAL OF VAGINAL DELIVERY FOR TWINS**
A. Lazarova; A. Stefanija; V. Jovanovska; V. Chibisheva
- ID 196** **MATERNAL COMPLICATIONS IN TWIN PREGNANCY**
O. Hoxhaj; M. Gjoni; E. Dede; D. Bajraktari
- ID 197** **MONOAMNIOTIC MONOCORIAL MANAGEMENT. CASES AND COMPLICATIONS IN OUR HOSPITAL DURING LAST YEAR**
O. Vaquerizo Ruiz; C. Gutiérrez-Cecchini Pérez; J. Adánez García; A. Escudero Gomis; M. Navarro López
- ID 198** **PREGNANCY OUTCOMES OF MONOCHORIONIC DIAMNIOTIC TWIN PREGNANCIES FROM NATURAL CONCEPTION VS. THOSE CONCEIVED BY ASSISTED REPRODUCTION TECHNOLOGIES**
A. Roca Prats; J. Escrig Estrems; J. Dasí Carrasco; A. Martínez Varea; V.J. Diago Almela; A. Perales Marín
- ID 199** **WHEN TWIN ANAEMIA POLYCYTHAEMIA SEQUENCE (TAPS) AND TWIN-TO-TWIN TRANSFUSION SYNDROME (TTTS) COEXIST**
K.B. Gajewska-Knapik; N. Deole; S.L. Adams
- ID 200** **RISK OF PREECLAMPSIA IN TWIN PREGNANCIES – A BIRTH REGISTER STUDY**
K. Laine; G. Murzakanova; K. Baker Sole; S. Räisänen
- ID 201** **CONSENSUS DEFINITION FOR SELECTIVE FETAL GROWTH RESTRICTION IN TWIN PREGNANCY: A DELPHI PROCEDURE**
A. Khalil; I. Beune; K. Hecher; K. Wynia; W. Ganzevoort; K. Reed; L. Lewi; D. Oepkes; E. Gratacos; B. Thilaganathan; S. Gordijn
- ID 203** **VAGINAL DELIVERY IN DIAMNIOTIC TWINS, REGARDLESS OF THE CHORIONICITY FIVE-YEAR EXPERIENCE OF A PORTUGUESE HOSPITAL**
I. Lourenço; H. Gomes; I. Rodrigues; E. Dias; C. Veríssimo
- ID 205** **RESEARCHING WITH MULTIPLE BIRTH FAMILIES – AN ETHICAL PERSPECTIVE**
N. Turville; L. Maguire; L. Clifford; L. Mcgrath-Scott
- ID 206** **PREGNANCY OUTCOMES IN TRIPLET PREGNANCIES**
J. Dasí Carrasco; J. Escrig Estrems; A. Roca Prats; A. Martínez Varea; J. Alberola Rubio; V.J. Diago Almela; A. Perales Marin
- ID 207** **SECOND TWIN DEMISE IN A MONOCHORIAL BIAMNIOTIC TWIN PREGNANCY**
M. Ruiz; B. Gastón; N. Abián; B. Pérez; I. Zabaleta; A. Safont; J. Barrenetxea; S. García; M. Urtasun; M. Bazán; I. Pedroarena
- ID 208** **PREOPERATIVE ANEMIA-POLYCYTHEMIA IN TWIN-TWIN TRANSFUSION SYNDROME: INCIDENCE, PLACENTAL CHARACTERISTICS AND NEONATAL OUTCOME**
L.S.A. Tollenaar; F. Slaghekke; J.M. Middeldorp; M.C. Haak; F.J. Klumper; E. Lopriore; D. Oepkes
- ID 209** **TAPS TRIAL: FETOSCOPIC LASER SURGERY VS. STANDARD CARE FOR TWIN ANEMIA-POLYCYTHEMIA SEQUENCE – AN OPEN LABEL RANDOMIZED CONTROLLED TRIAL**
L.S.A. Tollenaar; F. Slaghekke; J.M. Middeldorp; M.C. Haak; F.J. Klumper; E. Lopriore; D. Oepkes

- ID 210 PUERPERAL COMPLICATIONS AFTER INDUCTION OF LABOUR WITH DINOPROSTONA IN TWIN GESTATIONS**
A. Agustín Oliva; M. Benito Vielba; S. Agustín Oliva; R. Herrero Serrano; J. Manuel Campillos Maza; S. Castán Mateo
- ID 211 COMPLICATIONS OF DICHORIONIC TWIN PREGNANCIES**
M. Benito Vielba; M. Cholz Ezquerro; R. Laborda Gotor; A. Agustín Oliva; C. De Bonrosto Torralba; J.M. Campillos Maza
- ID 212 THE EFFECT OF CHORIONICITY ON THE OUTCOMES OF TRIPLET PREGNANCIES**
M. Levy Coles; Y. Mizrakli; N. Benshalom-Tirosh; O. Erez
- ID 213 COMPLICATIONS OF MONOCHORIONIC TWIN PREGNANCIES**
M. Benito Vielba; A. Agustín Oliva; M.J. Puente Luján; M. Roca Arquillue; C. De Bonrosto Torralba; J.M. Campillos Maza
- ID 215 BULGING MEMBRANES IN MULTIPLE PREGNANCY**
J. Escrig Estrems; J. Dasí Carrasco; A. Roca Prats; A. Martínez Varea; J. Alberola Rubio; V.J. Diago Almela; A. Perales Marin
- ID 216 DELAYED-INTERVAL DELIVERY: REPORT OF THREE CASES**
M. Benito Vielba; V. Pallares Arnal; R. Herrero Serrano; A. Agustín Oliva; C. De Bonrosto Torralba; J.M. Campillos Maza
- ID 217 BALLOON TAMPONADE IN TWINS**
A. Agustín Oliva; M. Benito Vielba; B. Diaz Rabasa; P. Andrés Orós; B. Rodríguez Solanilla; S. Castán Mateo
- ID 222 MAJOR DEPRESSIVE DISORDER AND NAUSEA AND VOMITING DURING PREGNANCY. SHARED GENETIC FACTORS?**
L. Colodro-Conde; B. Couvy-Duchesne; P. Lind; J. Painter; M. Wright; G. Montgomery; D. Nyholt; S.E. Medland
- ID 225 INCREASED RISK OF PREMATURE MENOPAUSE IN KOREAN WOMEN WHO HAD CHILDBIRTH DURING KOREAN WAR (1950-1953)**
S-A. Choe; J. Sung
- ID 226 ASSOCIATION BETWEEN FECAL MICROBIOME AND COLON ADENOMAS AND HYPERPLASTIC POLYPS IN MONOZYGOTIC TWINS**
W. Cozen; Y. Yu; A. Hwang; B. Ma; L. Buchanan; G. Yu; A. Wu; J. Buxbaum; H-J. Lenz; T.M. Mack; J. Millstein; J. Ravel
- ID 229 MINIMISING IATROGENIC MULTIPLE BIRTHS IN THE UK**
J. Denton; V. Peddie
- ID 233 GENOME-WIDE ANALYSIS OF BUCCAL DNA METHYLATION WITH THE METHYLATIONEPIC BEADCHIP IN MONOZYGOTIC TWINS CONCORDANT OR DISCORDANT FOR AGGRESSION**
J. van Dongen; E.E. Ehli; F.A. Hagenbeek; P.J. Roetman; T.C.E.M. van Beijsterveldt; G. Willemsen; R.R.J.M. Vermeiren; B.T. Heijmans; M. Bartels; G.E. Davies; D.I. Boomsma
- ID 237 GENETIC EFFECTS INTEGRATING THE LAYERS OF PERSONALITY: A TWIN STUDY OF ADOLESCENT OF PERSONALITY TRAITS AND VALUES**
A. Knafo-Noam; L. Twito; H. Segal
- ID 240 PARENTS' EXPERIENCES OF PARENTING PRETERM MULTIPLES**
L. Clifford
- ID 241 DELAYED-INTERVAL DELIVERY IN DICHORIONIC TWIN GESTATIONS: A SINGLE-CENTER EXPERIENCE**
S. García Francés; I. Jiménez Ubieto; N. Abián Franco; L. Martínez Jiménez; B. Gastón Moreno; B. Pérez Munárriz; M. Ruiz García; I. Zabaleta Loinaz; C. Larrañaga Azcárate
- ID 243 NEONATAL RESULTS OF THE SECOND TWIN DEPENDING ON THE TYPE OF VAGINAL DELIVERY**
M. Benito Vielba; B. Diaz Rabasa; M. Rodrigo Rodríguez; A. Agustín Oliva; C. De Bonrosto Torralba; J. M. Campillos Maza
- ID 244 SOCIAL STRAIN AND IRRITABLE BOWEL SYNDROME: HOW ARE THEY RELATED?**
M-B. Bengtson; J. Kutschke; J.R. Harris
- ID 245 GENOTYPE SPECIFIC FOR MONOZYGOTIC TWINS DISCORDANT FOR ANTI-THYROGLOBULIN AUTOANTIBODY (TgAb) POSITIVITY**
M. Watanabe; Y. Takenaka; C. Honda; Osaka Twin Research Group; Y. Iwatani
- ID 246 THE RELATIONSHIP BETWEEN LONELINESS AND SELF-REPORTS OF PHYSICAL AND MENTAL HEALTH: A CO-TWIN CONTROL STUDY**
T.S. Nilsen; J. Kutschke; J.R. Harris
- ID 247 OUTCOMES OF MONOCHORIONIC DIAMNIOTIC TWIN PREGNANCIES: A COMPARISON OF ASSISTED AND SPONTANEOUS CONCEPTIONS**
M. De La Calle; M. Cabrero; E. Pena; E. Martín Boado; B. Herrero; R. Rodríguez; E. Antolin; J.L. Bartha
- ID 248 THE BRAZILIAN TWIN REGISTRY: UPDATE AND BASELINE CHARACTERISTICS OF REGISTERED TWINS**
P. Ferreira; G. Jardim; F. Siqueira; V. Cunha Oliveira; H. Ribeiro Leite; L. Calais Ferreira
- ID 249 SMOKING AND CANCER AMONG MONOZYGOTIC DISCORDANT TWIN PAIRS: THE NORDIC TWIN STUDY OF CANCER**
T. Korhonen; J. Hjelmborg; K. Holst; A. Skytthe; E. Pukkala; J. Kutschke; J.R. Harris; L.A. Mucci; K. Christensen; K. Czene; H-O. Adami; T. Scheike; J. Kaprio
- ID 250 SUCCESSFUL CERVICAL CERCLAGE IN MULTIPLE PREGNANCY: ACCORDING TO A CLINICAL CASE**
N. Abián Franco; B. Gastón Moreno; S. García Francés; M. Ruiz García; I. Zabaleta Loinaz; B. Pérez Munárriz; L. Martínez Jimenez; A. Safont Gascón; I. Jimenez Ubieto; M. Huarte Ciganda; C. Larrañaga Azcárate; J. Zabaleta Jurío
- ID 251 TWIN-TWIN TRANSFUSION SYNDROME. ABOUT A CASE REPORT**
I. Zabaleta; M. Ruiz; B. Gastón; J. Barrenetxea; N. Abian; A. Safont; I. Pedroarena; M. Bazán; M. Urtasun; S. Garcia; I. Jimenez; L. Martinez

- ID 252** ACCURACY OF A ZYGOSITY DETERMINATION QUESTIONNAIRE OF ADULT TWINS AND TWIN CHILDREN
T.L. Cutler, K. Scurrah; J.L. Hopper
- ID 254** GROWTH AND BODY COMPOSITION OF TWINS PREMATURE INFANTS ACCORDING TO GESTATIONAL AGE AT BIRTH
N. Liotto; P. Roggero; P. Piemontese; A. Orsi; O. Amato; D. Morniroli; M. Lorella Gianni; F. Mosca
- ID 255** TWINNING AND MULTIPLE BIRTH RATES ACCORDING TO MATERNAL AGE IN THE ENTIRE COUNTRY OF BRAZIL AND ITS FIVE REGIONS FROM 2003 TO 2014
M.A. Corrêa Varella; T.G. Acquaviva; E. De Souza Fernandes; T. Kiehl Lucci; J. Arantes; S. Corte; N. Gomes; V. Frayze David; N.L. Segal; V. Silvia Raad Bussab; F. Leite Ribeiro; J. Varella Valentova; E. Otta
- ID 256** PULMONAR ACUTE EDEMA IN A MONOCHORIONIC TWIN PREGNANCY COMPLICATED WITH THE DEATH OF ONE TWIN
M. Huarte Ciganda; I. Jiménez Ubieto; L. Martínez Jiménez; B. Pérez Munárriz; A. Ochoa Prat; B. Bezares Pérez
- ID 259** FAMILIAL RISK OF CROSS-CANCER ASSOCIATIONS: FINDINGS FROM THE NORDIC TWIN STUDY OF CANCER (NorTwinCan)
J.R. Harris; J. Kaprio; K. Czene; L. Mucci; E. Pukkala; K. Christensen; T. Scheike; H-O. Adami; J. Hjelmborg
- ID 260** OBSTETRIC AND NEONATAL COMPLICATIONS IN TWIN PREGNANCIES AFTER OOCYTE DONATION
F. Boria; M. Cabrero; A. Mateos; M. Martín-Cameán; M. De La Calle
- ID 261** RECIDIVIST PRETERM DELIVERY IN A WOMAN WITH MULTIPLE RISK FACTORS AND CURRENT MONOCORIAL BIAMNIOTIC PREGNANCY: A CASE REPORT
M. Cabanes; M. Cabrero; M. Martín; A. Mateos; M. De La Calle; J.L. Bartha
- ID 262** ZYGOSITY, ANEUPLOIDY, AND GENDER COUNT IN TWIN GESTATIONS USING SNP-BASED NIPT
S. Leonard; S. Parmar; G. McNeill; A. Kalyan; E. Rivers; L. Meng; P. Vu; A. Ryan
- ID 263** TRAP SINDROME: A ATIPICAL CASE REPORT
A. Cunha; J. Telles; R. Tomaz; M. Lupchinski; C. Dietrich; O. Artigalás; D. Schneider; R. Rosa
- ID 264** TWIN PREGNANCY IN A WOMAN WITH UTERINE MALFORMATION: A CASE REPORT
A. Cunha; J. Telles; R. Tomaz; M. Lupchinski; C. Dietrich; O. Artigalás; D. Schneider; R. Rosa
- ID 265** ANTEPARTUM DEATH OF ONE MONOCHORIONIC CON TWIN WITH CYSTIC ADENOMATOID MALFORMATION
I. Jimenez Ubieto; B. Pérez Munárriz; L. Martínez Jiménez; M. Huarte Ciganda; I. Zabaleta; I. Martínez Montero
- ID 267** TWIN PREGNANCY: TIMING AND ROUTE OF DELIVERY – ONE-YEAR EXPERIENCE ON A DIFFERENTIATED PERINATAL CENTER
C. Gomes; J. Pinto; M. Gadelha; A.P. Silva
- ID 268** DELAYED-INTERVAL DELIVERY IN TWINS: HOW SUCCESSFUL?
C. Gomes; F. Vilela; J. Pinto; A.P. Silva; O. Viseu
- ID 269** AN OVERVIEW OF TWIN PREGNANCY COMPLICATIONS: THE EXPERIENCE OF A DIFFERENTIATED PERINATAL CENTER
C. Gomes; P. Soares; A. Edral; M. Gadelha; A.P. Silva
- ID 270** PATHOLOGICAL NEUROIMAGING AS A CONSEQUENCE OF THE FETAL DEATH OF A TWIN
L. Martínez Jiménez; I. Jiménez Ubieto; M. Huarte Ciganda; B. Pérez Munárriz; A. Pérez Rodríguez; N. Abian Franco
- ID 273** FETAL TACHYCARDIA IN TWIN PREGNANCY
Á. Uceda; L. Deiros; E. Castaño; M. De La Calle Fernández; R. Rodríguez; F. Gutiérrez- Larraya; J.L. Bartha
- ID 277** ADOLESCENCE BODY MASS INDEX AND RISK OF EARLY MENARCHE: A MENDELIAN RANDOMIZATION STUDY
S-A. Choe; H. Kim; J. Sung
- ID 278** GENETICS AND ENVIRONMENTS ON AGE AT MENARCHE
H. Kim; S-A. Choe; J. Sung
- ID 279** A QUALITY IMPROVEMENT PROGRAMME IN ENGLAND AIMED AT IMPROVING ANTENATAL CARE FOR MULTIPLE PREGNANCIES
K. Reed; A. McCarthy; H. Turier; J. Gorringer; D. Dillion; M. Burley
- ID 280** COMPLICATIONS DURING COMPLETE BREECH EXTRACTION IN AN ACTIVE MANAGEMENT PROTOCOL INTRODUCTION
J. Adánez García; O. Vaquerizo Ruiz; M. Navarro López; A. Escudero Gomis; C. Gutiérrez-Cecchini Pérez; J. Ferrer Barriendos
- ID 281** “CHALLENGES” AND “THINGS THAT HELP” IN PARENTING MULTIPLE BIRTH CHILDREN
S. Ochiai; N. Naito; E. Otaka; Y. Ochi; A. Matsukawa; H. Ogishi; C. Hashimoto; S. Tatsuki
- ID 284** THE USE OF CERVICAL PESSARY IN A SPANISH POPULATION OF TRIPLET PREGNANCIES
M. De La Calle; S. Arévalo; N. Martínez; C. Rodo; E. Antolin; E. Carreras; J.L. Bartha
- ID 285** ENVIRONMENTAL EFFECTS ON EPIGENETIC VARIABILITY: INSIGHTS FROM MONOZYGOTIC TWIN BASED STUDIES
E. Carnero-Montoro; A. Visconti; J. Van Dongen; T.D. Spector; D.I. Boomsma; M. Falchi; J.T. Bell
- ID 287** ANALYSIS OF GENETIC OR ENVIRONMENTAL EFFECTS ON THE IRRITABLE BOWEL SYNDROME ASSOCIATED GUT MICROBIOME WITH KOREAN HEALTHY TWIN REGISTRY
H.A. Park; J. Sung
- ID 288** PATOLOGICAL UMBILICAL ARTERY DOPPLER FLOW FINDINGS IN MONOCHORIONIC TWIN PREGNANCIES BETWEEN 16 AND 22 WEEKS OF GESTATION: DOES IT REALLY MATTER?
A. Ingala; S. Arduino; G. Benedetto; C. Bossotti; E. Cantanna; P. Gaglioti; E. Libanori; E. Viora; T. Todros
- ID 289** ASSOCIATION BETWEEN PAPP-A LEVELS DURING THE FIRST TRIMESTER AND ADVERSE OBSTETRICAL OUTCOMES IN TWIN PREGNANCY
G. Benedetto; S. Arduino; C. Bossotti; E. Cantanna; A. Ingala; E. Libanori; E. Muccinelli; E. Viora; T. Todros

- ID 290 CERCLAGE VS. PESSARY TO PREVENT PRETERM BIRTH IN TWIN PREGNANCIES AND SONOGRAPHIC SHORT CERVIX**
M. Ruiz García; J. Zabaleta Jurío;
C. Larrañaga Azcárate; I. Zabaleta Loinaz;
B. Gastón Moreno; N. Franco Abián;
J. Barrenetxea Arrinda; A. Safont; M. Bazán;
I. Pedroarena
- ID 291 DOBLE CERCLAGE IN TWIN PREGNANCY**
M. Ruiz García; I. Zabaleta Loinaz; N. Abián Franco;
B. Gastón Moreno; M. Bazán;
I. Pedroarena Lecumberri; A. Safont;
J. Barrenetxea Arrinda
- ID 294 A STUDY OF PENETRANCE FOR BREAST CANCER IN IDENTICAL TWIN PAIRS**
E. Lee; A. Hwang; W. Cozen; A. Hamilton; T. Mack
- ID 295 DETERMINANTS OF CONCORDANCE FOR AGE AT MENARCHE AMONG TWINS**
D. Roy; A. Hwang; W. Cozen; A. Hamilton; T. Mack
- ID 298 ON FAMILIAL RISK OF MULTIPLE CANCERS: DOES BRAIN TUMOR OCCURRENCE RELATE GENETICALLY TO OTHER CANCERS?**
J. Hjelmborg; J. Kaprio; T. Korhonen; L.A. Mucci;
K. Christensen; H-O. Adami; T. Scheike; J.R. Harris
- ID 299 CpGforID: EPIGENETIC DISCRIMINATION OF IDENTICAL TWINS UNDER THE FORENSIC SCENARIO**
A. Vidaki; E. Carnero-Montoro; R. Boers; J. Boers;
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