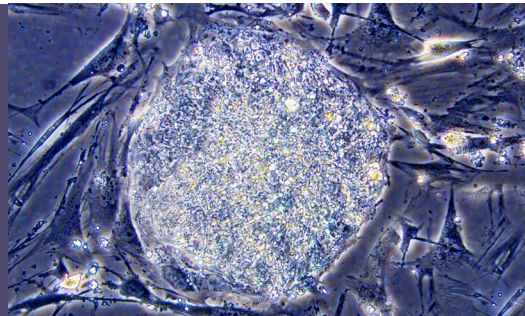


PRELIMINARY PROGRAM

3RD INTERNATIONAL
CONGRESS
ON RESPONSIBLE
STEM CELL
RESEARCH **RSCR**



VATICAN CITY,
APRIL 25-28, 2012

WWW.STEMCELLSROME2012.ORG

COMMITTEES

ORGANIZERS



PONTIFICAL ACADEMY FOR LIFE
H.E. Msgr. Ignacio Carrasco De Paula



FONDATION JEROME LEJEUNE
Mr. Jean-Marie Le Méné



WORLD FEDERATION
OF CATHOLIC MEDICAL
ASSOCIATIONS (FIAMC)
Dr. José María Simón Castellví

IN COOPERATION WITH



COMITE CONSULTATIF BIOETHIQUE MONACO
Mrs. Fabienne Mourou

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CONGRESS ON RESPONSIBLE STEM CELL RESEARCH

This Conference will review the present and perspective clinical use of stem cells, with emphasis on the ethical aspects of their applications. Recent progress in the study of induced pluripotent stem cells (iP-SCs) obtained by reprogramming ordinary, differentiated cells of the adult organism will be discussed, including the creation of cellular models of diseases and potential developments in the field of regenerative medicine.

Advances in umbilical cord blood stem cells will also be reviewed, together with the new sources of stem cells, including placenta, amniotic fluid and gingival fibroblasts. Additional topics will include pluripotency, maintenance, migration, differentiation, the niche, and the paracrine effect of adult stem cell

PONTIFICAL ACADEMY FOR LIFE (PAV)

The Pontifical Academy for Life, founded by Pope John Paul II, exists for the promotion and defense of human life, especially regarding bioethics as it regards

Christian morality. Its statutes are defined by the motu proprio Vitae Mysterium of Pope John Paul II on 11 February 1994.

FONDATION JEROME LEJEUNE

The Jérôme Lejeune Foundation was established in 1996, two years after Jérôme Lejeune's death. While the foundation's principal area of research has been Down syndrome, it also conducts and funds research into other genetic intelligence disabilities such as cri du chat, Rett's syndrome, fragile X, and others. The Lejeune Medical Institute in Paris has a staff of

eleven physicians of various specialties and manages a patient load of approximately 3,500 annually.

The Jérôme Lejeune Foundation also maintains www.genethique.org, the leading French-language website for daily information and analysis on developments in bioethics.

Genéthique offers a free monthly newsletter with analysis in French and English

WORLD FEDERATION OF CATHOLIC MEDICAL ASSOCIATIONS (FIAMC)

The International Federation of Catholic Medical Associations (FIAMC) comprises approximately sixty national associations of Catholic physicians from throughout the world. The mission of the FIAMC focuses on safeguarding,

defending and promoting human life in different cultures. Intelligent, well-planned, generous and ongoing group work is required in each country as well as on the international level. Worldwide coordination facilitates more effective defence of the Christian commitment of thousands of medical professionals in scientific research and in practising their profession.

SCIENTIFIC PROGRAM OVERVIEW

WEDNESDAY, APRIL 25, 2012

14:30 18:30	Welcome addresses	
	Key lecture: A GENERAL OVERVIEW OF STEM CELL RESEARCH, TODAY <i>Stem cell therapeutics: from HSC to iPSCs</i>	
	SESSION 1 STEM CELL BIOLOGY I	
	STEM CELL NICHE	
	<i>Hematopoietic and mesenchymal stem cell niche</i>	<i>Neural regulation of the cell stem niche</i>
	MESENCHYMAL STEM CELL BIOLOGY	
	PARACRINE EFFECT <i>Paracrine effects of adult stem cells in heart repair</i>	
	FACILITATION OF ADULT STEM CELL ENGRAFTMENT	
	TRACHEA ENGINEERING <i>Restauration of trachea with stem cell engineering</i>	

THURSDAY, APRIL 26, 2012

09:00 13:00	SESSION 2 CELL REPROGRAMMING - IPSCS			
	a) VARIOUS APPROACHES FOR OBTAINING iPSCs <i>Chemical approach, small molecules</i>			
	b) DIRECT REPROGRAMMING <i>Direct reprogramming of skin fibroblasts to dopaminergic neurons</i>			
	c) iPSCs FOR DISEASE MODELING <i>iPSCs for Parkinson's modeling</i>			
	d) iPSCs FOR CLINICAL APPLICATION			
	<i>Using iPSCs to study and possibly treat diabetes 1</i>	<i>iPSCs derived photoreceptors for restauration of retinal structure and function</i>	<i>Production of function red blood cells from iPSCs</i>	<i>Zinc finger nucleases gene therapy with iPSCs for the treatment of sickle cell anemia</i>
	SESSION 3 CLINICAL APPLICATIONS OF SOMATIC STEM CELLS - I			
a) THE HEART <i>Stem cells in angina pectoris refractory to conventional therapy</i>				
b) LIMB ISCHEMIA <i>Stem cells in limb ischemia</i>				
14:00 18:00	SESSION 4 CLINICAL APPLICATIONS OF SOMATIC STEM CELLS - II			
	a) NEUROLOGY			
	<i>Stem cell in multiple sclerosis</i>		<i>Non embryonic stem cells in stroke</i>	
	b) LIVER <i>Stem cells for liver repair and regeneration</i>			
	c) SKIN <i>Stem cells in Epidermolysis bullosa</i>			
	d) BONE <i>Mesenchymal Stem Cells in osteogenesis imperfecta</i>			
	e) CORNEA <i>Stem cells for repair and re generation of human cornea</i>			
	f) GINGIVAL STEM CELLS <i>Gingival fibroblasts for the treatment of aneurisms</i>			
	g) BURNS <i>Stem cells for treatment of severe burns</i>			
	h) IMMUNOMODULATION			
<i>Immune capacities of mesenchymal stem cells</i>		<i>Immunosuppressive capacities of mesenchymal stem cells for clinical applications</i>	<i>Mesenchymal stem cells in resistant tuberculosis</i>	

FRIDAY, APRIL 27, 2012

09:00 13:00	SESSION 5 CLINICAL APPLICATIONS OF STEM CELLS			
	a) TISSUE ENGINEERING WITH SOMATIC STEM CELLS			
	Bone engineering <i>Bone engineering with stem cells</i>		Fetal tissue engineering <i>Fetal tissue engineering from amniotic mesenchymal stem cells</i>	
	b) CORD BLOOD STEM CELLS			
	<i>Results of hematopoietic stem cell transplantation for haematological diseases: a comparison between cord blood HSCs and HSCs from other origine</i>	<i>Umbilical cord blood stem cells in regenerative medicine</i>	<i>Umbilical cord blood stem cells in children with neurological diseases</i>	<i>Ethical issues in umbilical cord blood banking: a comparative analysis of documents from national and international institutions</i>
	SESSION 6 TRANSLATION TO CLINICS			
	a) REGULATIONS			
	<i>Stem cells banking</i>	<i>Italian biobanks network: ethical and legal aspects</i>	<i>European regulations on experimental and clinical use of stem cells</i>	HRS 14:00 <i>Networking advanced therapies</i>
14:00 18:00	b) INDUSTRY PERSPECTIVE			
	<i>Human stem cells in translation and clinical trials</i>		<i>The point of view of industry on human stem cells</i>	
	SESSION 7 ETHICS OF STEM CELL RESEARCH IN VIEW OF CLINICAL APPLICATIONS			
	ETHICS			
	<i>Research ethics committees and ethical review of clinical trials of stem cell therapy</i>	<i>Ethics and recent trends in stem cell research</i>		<i>Stem cells and clinical ethics</i>

SATURDAY, APRIL 28, 2012

09:00	SYNTHESIS	
10:30	<i>The lessons from stem cell biology</i>	<i>Stem cells at bedside</i>
11:00 13:00	AUDIENCE WITH THE HOLY FATHER	

WEDNESDAY APRIL, 25

14:30
18:30

WELCOME ADDRESSES

Pontifical Academy for Life
Fondation Jerome Lejeune
World Federation of Catholic Medical Associations
Comité Consultatif Bioéthique Monaco

KEY LECTURE

A GENERAL OVERVIEW OF STEM CELL RESEARCH, TODAY

Stem cell therapeutics: from HSC to iPSCs

G. Daley (Boston - USA)

SESSION 1 STEM CELL BIOLOGY I

STEM CELL NICHE

Hematopoietic and mesenchymal stem cell niche

C. Verfaillie (Leuven - B)

Neural regulation of the cell stem niche

P.S. Frenette (New York - USA)

**NOTCH SIGNALING - WNT SIGNALING IN THE REGULATION OF
STEM CELL SELF-RENEWAL AND DIFFERENTIATION**

AJ. Wagers (Boston - USA)

MESENCHYMAL STEM CELL BIOLOGY

W.W. Fibbe (Leiden - NL)

PARACRINE EFFECT

Paracrine effects of adult stem cells in heart repair

M. Gnecci (Pavia - I)

FACILITATION OF ADULT STEM CELL ENGRAFTMENT

H.E. Broxmeyer (Indianapolis - USA)

TRACHEA ENGINEERING

Restoration of trachea with stem cell engineering

P. Macchiarelli (Stockholm - SW)

09:00
13:00

SESSION 2 CELL REPROGRAMMING - iPSCs

a) VARIOUS APPROACHES FOR OBTAINING iPSCs

Chemical approach, small molecules

S. Ding (La Jolla - USA)

b) DIRECT REPROGRAMMING

Direct reprogramming of skin fibroblasts to dopaminergic neurons

V. Broccoli (Milan - I)

c) iPSCs FOR DISEASE MODELING

iPSCs for Parkinson's modeling

T. Kunath (Edinburgh - UK)

d) iPSCs FOR CLINICAL APPLICATION

Using iPSCs to study and possibly treat diabetes 1

D. A. Melton (Boston - USA)

iPSCs derived photoreceptors for restoration of retinal structure and function

M. Young (Boston - USA)

Production of functional red blood cells from iPSCs

L. Douay (Paris - F)

Zinc finger nucleases gene therapy with iPSCs for the treatment of sickle cell anemia

K. H. Joung (Boston - USA)

THURSDAY APRIL, 26

09:00 **SESSION 3** CLINICAL APPLICATIONS OF
13:00 SOMATIC STEM CELLS - I

a) THE HEART

Bone marrow cell mobilization in ST-segment elevation acute anterior myocardial infarction

M. Capogrossi (Rome -I)

b) LIMB ISCHEMIA

Endothelial progenitor cell Therapy for organ regeneration

T. Asahara (Kobe - J)

14:00 **SESSION 4** CLINICAL APPLICATIONS OF
18:00 SOMATIC STEM CELLS - II

a) NEUROLOGY

Stem cell in multiple sclerosis

N. Scolding (Bristol - UK)

Non embryonic stem cells in stroke: from bench to bedside

C. D. Hess (Augusta - USA)

b) LIVER

Stem cells for liver repair and regeneration

E. Sokal (Belgium -B)

c) SKIN

Stem cells in Epidermolysis bullosa

J. Wagner (Minneapolis -USA)

d) BONE

Mesenchymal stem cells in osteogenesis imperfecta

EH. Horwitz (Philadelphia -USA)

14:00
18:00

e) CORNEA

Stem cells for repair and regeneration of human cornea

P. Rama (Milan - I)

f) GINGIVAL STEM CELLS

Gingival fibroblasts for the treatment of aneurisms

A. Lafont (Paris -F)

g) BURNS

Stem cells for treatment of severe burns

J. J. Lataillade (Clamart -F)

h) IMMUNOMODULATION

Immune capacities of mesenchymal stem cells

O. Rindgen (Stockholm - SW)

Immunosuppressive capacities of mesenchymal stem cells for clinical applications

K. Leblanc (Stockholm - SW)

Mesenchymal stem cells in resistant tuberculosis

M. Mauerer (Stockholm - SW)

FRIDAY APRIL, 27

09:00
13:00

SESSION 5 CLINICAL APPLICATIONS OF STEM CELLS

a) TISSUE ENGINEERING WITH SOMATIC STEM CELLS

BONE ENGINEERING

Bone engineering with stem cells

R. Cancedda (Genova - I)

FETAL TISSUE ENGINEERING

Fetal tissue engineering from amniotic mesenchymal stem cells

D. Fauza (Boston - USA)

b) CORD BLOOD STEM CELLS

Results of hematopoietic stem cell transplantation for haematological diseases: a comparison between cord blood HSCs and HSCs from other origine

E. Gluckman (Paris - F)

Umbilical cord blood stem cells in regenerative medicine

C. Mc Guckin (Lyon - F)

Umbilical cord blood stem cells in children with neurological diseases

J. Kutzberg (Durham - USA)

Ethical issues in umbilical cord blood banking: a comparative analysis of documents from national and international institutions

C. Petrini (Rome - I)

SESSION 6 TRANSLATION TO CLINICS

a) REGULATIONS

Stem cells banking

P. Rebulla (Milan - I)

Italian biobanks network: ethical and legal aspects

A. Nanni Costa (Rome - I)

European regulations on experimental and clinical use of stem cells

C. Pintus (Rome - I)

14:00
18:00

Networking advanced therapies
G. Migliaccio (Rome - I)

b) INDUSTRY PERSPECTIVE

Human stem cells in translation and clinical trials
Trounson (San Francisco - USA)

The point of view of industry on human stem cells
M. Hennig (Basel - CH)

**SESSION 7 ETHICS OF
STEM CELL RESEARCH
IN VIEW OF CLINICAL
APPLICATIONS**

ETHICS

Research ethics committees and ethical review of clinical trials
of stem cell therapy
A. G. Spagnolo (Rome - I)

Ethics and recent trends in stem cell research
J. Suaudeau (Rome - I)

Stem cells and clinical ethics
R. Pegoraro (Rome - I)

SATURDAY APRIL, 28

09:00

SYNTHESIS

10:30

The lessons from stem cell biology

T. Brevini (Milan - I)

Stem cells at bedside

M. Muraca (Rome - I)

11:00

AUDIENCE WITH THE HOLY FATHER

13:00

FACULTY

ASAHARA T., *Kobe - Japan*
BREVINI T., *Milan - Italy*
BROCCOLI V., *Milan - Italy*
BROXMEYER H.E., *Indianapolis - United States of America*
CANCEDDA R., *Genoa - Italy*
CAPOGROSSI M., *Rome - Italy*
DALEY G., *Boston - United States of America*
DING S., *San Francisco - United States of America*
DOUAY L., *Paris - France*
FAUZA D., *Boston - United States of America*
FIBBE W. E., *Leiden - Netherlands*
FRENETTE PS., *New York - United States of America*
GLUCKMAN E., *Paris - France*
GNECCHI M., *Pavia - Italy*
HENNIG M., *Basel - Switzerland*
HESS D. C., *Augusta - United States of America*
HORWITZ E.H., *Philadelphia - United States of America*
JOUNG K.H., *Boston - United States of America*
KUNATH T., *Edinburgh - United Kingdom*
KUTZBERG J., *Durham - United States of America*
LAFONT A., *Paris - France*
LATAILLADE J. J., *Clamart - France*
LEBLANC K., *Stockholm - Sweden*
MACCHIARINI P., *Stockholm - Sweden*
MAUERER M., *Stockholm - Sweden*
MCGUCKIN C., *Lyon - France*
MELTON D. A., *Boston - United States of America*
MIGLIACCIO G., *Rome - Italy*
MURACA M., *Rome - Italy*
NANNI COSTA A., *Rome - Italy*
PEGORARO R., *Rome - Italy*
PETRINI C., *Rome - Italy*
PINTUS C., *Rome - Italy*
RAMA P., *Milan - Italy*
REBULLA P., *Milan - Italy*
RINGDEN O., *Stockholm - Sweden*
SCOLDING N., *Bristol - United Kingdom*
SOKAL E., *Bruxelles - Belgium*
SPAGNOLO A. G., *Rome - Italy*
SUAUDEAU J., *Rome - Italy*
TROUNSON A., *San Francisco - United States of America*
VERFAILLIE C., *Louvain - Netherlands*
WAGERS AJ., *Boston - United States of America*
WAGNER J., *Minneapolis - United States of America*
YOUNG M., *Boston - United States of America*

SCIENTIFIC INFORMATION

CME AND UEMS CREDITS

UEMS Credits

As in our previous congresses, an application will be made to the (EACCME) European Accreditation Council for Continuing Medical Education Institution of The European Union of Medical Specialists (UEMS). Further details will be made available on the congress web site.

CME for Italian delegates

The Congress will be accredited to the Ministry of Health for Continuing Medical Education, for the following professionals:

Medical doctor

Biologist

Psychologist

Nurse

ATTENDANCE CERTIFICATES

Attendance certificates will be delivered on request to all registered participants at the end of the Congress.

ABSTRACT SUBMISSION

Please contact the official web site for more information.

Topics

BIOLOGY

TISSUE ENGINEERING

CLINICAL APPLICATION OF STEM CELLS

CORD BLOOD STEM CELLS

ETHICS

NETWORKING

ADVANCED THERAPIES

Deadline for submission: February 26, 2012

GENERAL INFORMATION

VENUE

Aula Nuova del Sinodo - Vatican City

LANGUAGE

The official languages will be English, French and Italian; simultaneous translation will be provided.

VISA & INVITATION LETTER

Participants are requested to check with the Italian Consulate or diplomatic mission in their home country for VISA requirements.

It is the responsibility of the participant to obtain a VISA if required.

Conference invitation letter

Please send an e-mail with your full name (as printed in your passport), full postal address and passport number to the 3rd RSCR Organizing Secretariat at:

stemcellsrome2012@keycongress.com and an official invitation letter (PDF) will be prepared and sent to your e-mail. Invitation letters are prepared solely for individuals and are mailed directly to them.

PRESS REGISTRATION

All media representatives are kindly requested to register well in advance; please contact the official web site to get more information.

SPONSORSHIP & EXHIBITION

A professional exhibition will be held within the framework of the Congress.

For details regarding sponsorship opportunities and/or exhibition space, please contact:

Ms. Arianna Caldon, Industry Liaison & Sales

E-mail: a.caldon@keycongress.com

Tel: +39 049 8729511 Fax: +39 049 8729512

REGISTRATION FEES (Please contact the official web site to get more information)

	From October 1, 2011 up to March 31, 2012	From March 31, 2012 up to April 1, 2012
FIAMC, PAV, Fondation LEJEUNE Members	€ 200,00	€ 250,00
DELEGATES	€ 300,00	€ 400,00
DELEGATES FROM SPECIAL AREAS ⁽¹⁾	€ 100,00	€ 150,00
STUDENTS/NURSES ⁽²⁾	€ 150,00	€ 150,00
SATURDAY APRIL 28, 2012 (one day participation) ⁽³⁾	€ 100,00	€ 150,00

All registration fees are quoted in Euro and include 21% VAT.

⁽¹⁾ **Eastern European Countries and Specific Areas:** Poland, Hungary, Romania, Bulgaria, Albania, Serbia, Russian Federation, Moldova, Latvia, Ukraine, Lithuania, Estonia. **South Mediterranean Areas:** Libya, Tunisia, Morocco, Egypt, Algeria, Iran. **Specific Areas:** India, China and South America.

⁽²⁾ Please provide a certificate - ⁽³⁾ Single day registration is available on Saturday

Delegate registration fee includes: Admission to all scientific sessions; Congress kit with Final Programme and Abstract book; Certificate of Attendance; Coffee breaks.

ORGANIZING SECRETARIAT



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