# TRAINING PROGRAM FOR AN INTER-UNIVERSITY DIPLOMA IN CELL THERAPY – ADULTS & PEDIATRICS

**Duration 77 h**: Theoretical Module 38 h + Practical Training Module 36 h + a 3 h theoretical exam

Monday, January 14 <sup>th</sup> 2008 Morning 08h3	30-12h00
Ontogenesis     Human Embryonic Cells <i>Afternoon : 13h3</i>	M. Tavian, Paris J. De Vos, Montpellier
<ul> <li>Embryonic Cells and Cell Plasticity</li> <li>Micro-environment</li> <li>Haematopoietic growth factors</li> <li>Hematopoiesis inhibitors</li> </ul>	J. De Vos, Montpellier R. Henschler, Francfort H. Bertz, Freiburg E. Wunder, Mulhouse
Tuesday, January 15 <sup>th</sup> 2008 Morning : 081	h30-12h15
Apoptosis Adhesion molecules : mobilization/homing Collection of haematopoietic stem cells :	B. Drénou, Mulhouse H. Sovalat, Mulhouse
<ul> <li>Adults</li> <li>Pediatrics</li> <li>Freezing, cryopreservation of stem cells</li> </ul>	M. Ojeda, Mulhouse J. Kanold, Clermont-Ferrand Y. Arkam, Mulhouse
Afternoon : 13h4	J. Kanold, Clermont-Ferrand
•CD34 Quality control •Gene therapy •Alloreactivity •Residual disease	B. Drénou, Mulhouse N. Cartier, Paris (to be determined) A. Tchirkov, Clermont-Ferrand
Wednesday, January 16 <sup>th</sup> 2008 Morning : 08I	h30-12h30
Cardiomyoplasty :	
<ul> <li>with blood stem cells</li> <li>with myoblasts</li> <li>Arteritis of lower limbs</li> <li>Diabetes and cell therapy</li> </ul>	Ph. Hénon, Mulhouse K.Azarnoush, Clermont-Ferrand B. Pignon, Paris L. Kessler, Strasbourg 30-18h15
<ul> <li>Purging and stem cell expansion</li> <li>Bones and cell therapy : Experimental</li> <li>Bones and cell therapy : Applications</li> <li>Ophtalmology and cell therapy</li> </ul>	L. Douay, Paris K. Anselme, Mulhouse S. Descamps, Clermont-Ferrand F.Chiambaretta, Clermont-Ferrand
Thursday, January 17 <sup>th</sup> January 2008 Morning : 08h	h30-12h00
<ul> <li>Extracorporal photochemotherapy</li> <li>Post-graft haematopoietic recovery</li> <li>Neuroblastoma : transplantation and gene therapy Afternoon : 14h0</li> </ul>	
<ul> <li>Myeloma and autografting</li> <li>Haematopoietic stem cell allografts and «mini» allo</li> <li>Cord blood transplantations</li> </ul>	J.F. Rossi, Montpellier

Friday, January 18 <sup>th</sup> 2008		
•	Cell cultures and applications :	
	<ul> <li>Endothelial cells</li> </ul>	

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Dendritic cells and vaccinations N. Schwabe, Freiburg

o Cardiomyocyte cells

o Mesenchymal cells

- E. Wunder, Mulhouse S. Vallejo, Mulhouse
  - L. Sensebé, Tours

Mornina : 08h30-12h30

Afternoon : 14h00-18h45

Round table Cell therapy regulation Registration and regulation in France J.P. Jouet, Lille Regulation in Europe H. Espérou, Paris Quality control/Organization of a cellular V. Rimelen Mulhouse, L. Sensebé therapy laboratory • JACIE Procedures J. Kanold, V. Rimelen General discussion

# Practical Training module : Monday, May 19<sup>th</sup> to Friday, May 23<sup>rd</sup> 2008

Training in one of the two Cell Therapy Centres implied in this diploma (Mulhouse and Clermont-Ferrand Universities) Practical training program :

#### **COMMON TO BOTH SIDES** Graft guality control : FCM, cultures of haematopoietic progenitors 1 day 0 Study of residual disease : FCM, molecular biology 1 day 0 Cell sorting / selection 1 dav 0 Graft collection observation 0 Reinjection of grafts in a clinical haematology department observation 0 Quality control/Cell products tracking 1/2 day TP 0 SPECIFICITIES TO EACH SITE 1 day TP Mulhouse : Autologous haematopoietic stem cell transplantation, cellular cardiomyoplasty, experimental bone o Clermont-Ferrand : Pediatrics orientation (graft collection and purging in Neuroblastoma), extracorporal chemotherapy Theoretical exam (1st module): Friday, May 23rd 2008 - 14h00 to 17h00 REPORT

A written report involving personal research will concern either a practical or a theoretical approach in relation with one of the aspects developed during the training. This work should be returned by October, 31<sup>st</sup> 2008 and can be written either in french or english.

# **INTER-UNIVERSITY DIPLOMA IN CELL THERAPY**

The diploma is delivered to all candidates who successfully achieved the 1st module exam, the practical training and the written report with an « honourable mention » attributed by the jury.

# EDUCATIONAL RESPONSIBLES

Teaching Director: Ph. HENON, MD, Head of the 'Institut de Recherche en Hématologie et Transplantation' (IRHT), Professor at 'Université de Haute Alsace', Mulhouse

Teaching Co-Director : Justyna KANOLD, MD, Head of the 'Unité Bioclinique de Thérapie Cellulaire' - Pediatrics B at 'Centre Hospitalier Universitaire d'Auvergne', Clermont-Ferrand

B. DRENOU, MD : Head of Hematology Dept. - Centre Hospitalier, Mulhouse

M. Arnaud HAERINGER, Director of SERFA 'Université de Haute Alsace', Mulhouse

## **ATTENDEES**

MDs, Pharmacists, Veterinarians, PhD in Human Biology, Haematology and/or Pediatrics Interns/Residents, Biomedical Engineers (pharmaceutical industry), from European Union

## AIMS

- Approach of « Regenerative Medicine » while learning cell therapy through all its various developmental aspects : hemato-oncology, cardiology, neurology, orthopedics, immunology, ophthalmology, diabetes mellitus
- Considering the spectacular evolution in these field, update of knowledge in hematopoiesis and technical development in cell therapy,
- Facilitate a subsequent integration in any cell therapy unit (research, clinical or industrial) to the holders of our Inter-University Diploma

FEES

#### 1 600 €

Including : registration fees, conferences, practical training, documentation, coffee breaks and luncheons during the theoretical module

# **ORGANISATION - LOCATION**

Duration : 77 hours spread over 2 weeks including a 3 h examination + writing of a report Dates : January 14<sup>th</sup> to January 18<sup>th</sup> 2008, and May 19th to May 23<sup>rd</sup> 2008

- Locations : 1 week of theoretical teaching at SERFA building 'Université de Haute-Alsace', Mulhouse
  - 1 week of practical training in one of the 2 cell therapy centres :Clermont-Ferrand or Mulhouse.

Students will be assigned to one of the two locations according to either their geographical location or to the centre specificity that will most attract them.

Classes and practical training will be either in french or in english, always with an english audiovisual support

# **INFORMATION - REGISTRATION**

#### Catherine MULLER

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With support from : AMGEN France

# **Inter-University Diploma**

# CELL THERAPY Adults and pediatrics

**Mulhouse and Clermont-Ferrand** 

2007-2008 SESSION





