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MOLEDA SUMMER SCHOOL: "Non-viral gene transfer into muscle and skin"
Evry-Maison Alfort 16-22 September 2007

The course will deliver basic knowledge and practical experience on muscle and skin biology and on non-viral gene transfer technologies. The course aims at encouraging collaborations between laboratories involved in gene transfer in Europe and implement EC-funded projects by integrating different competences and optimize gene transfer technologies for efficient and safe protocols of treatment and prevention of diseases.

THEORETICAL COURSE

Place: GENOCENTRE, Evry, 16-19 September, 2007 Number of participants: 150 max

Provisional programme ⁽¹⁾:

Sept 16, 15 h: **Opening Session** D. SCHERMAN *Welcome addresses* + Sponsors: CLINIGENE, MYORES, Ile-de-France
Sessions 1-2: Basic areas: physiology, stem cells and development D. MONTARRAS, Paris (F), R. SCHROETER, Bad Nauheim (D), V. PREAT Louvain-la-Neuve (B), J.T. VILQUIN, Paris (F)
Sessions 3-4: Diseases, therapies, animal models and functional evaluation G. DICKSON, London (UK), D. ISRAELI, F. FOUGEROUSSE, I. RICHARD Evry (F)
Session 5 Muscle gene transfer platform: principles and technologies D. SCHERMAN, Evry/Paris (F), I. MATHIESEN, Oslo (NO), M. SCHLEEF, Bielefeld (D)
Session 6-8 Delivery strategies: electrotransfer ultrasound & laser, hydrodynamic S. BLOT, Maison Alfort (F), I. GRAHAM, D. WELLS, London (UK), E. GALUN, Jerusalem (IL) P. PARREN, Utrecht (NL)
Session 9-10 Therapeutic applications and industrial exploitation A. PANET Jerusalem (IL), C. PINSET, CELOGOS, Evry (F), M. QUARTA WETWAREConcepts, Padoua (I), V. SCHIRRMACHER, Heidelberg (D)
Sept 19, 11-13 h: **Closing Session** C. OTTENSMEIER, Southampton (UK), S. BRAUN, Evry (F), A-M MASQUELIER, Evry (F)

⁽¹⁾ The list of lecturers in the sessions is being updated. Plenary lectures will be followed by short communications presented by young researchers. Posters viewing will be throughout all length of the course.

PRACTICAL COURSE

Place: Ecole Nationale Vétérinaire d'Alfort (ENVA), Maison Alfort / Faculty of Pharmacy, Paris, 19-22 Sept 2007
Number of participants: 30 max, divided in 3 groups

Wednesday 19, 16h-20h ENVA

1 h30: Introduction: the ethics and good practices in animal experimentation; Administration and anesthesia; Large animal experiments. Stéphane BLOT

Rotating sessions:

Session 1: Intradermal administration (with and without ET)
Session 2: Direct intramuscular injection: (with and without ET) (rat or dog)
Session 3: Hydrodynamic administration (mouse tail vein and dog)

Thursday 20, 9h-18h

Morning: 1h: In vitro and ex vivo evaluation technique (muscle and skin histology). Techniques will chosen according to the experiments.

2 - 2.5 hours rotating sessions:

Session 1: How to handle muscle samples, freezing, cryostat slides, conventional staining
Session 2: Histology, immunohistology (fluorescence/DAB). Exercise in slides interpretation Conventional muscular histology (HE, morphology, score labeled fibers, morphometry)
Session 3: Functional evaluation at cell level (example of membrane permeability, calcium retention, restoration of the complex associated to the dystrophin NOs (example of dystrophin deficit)

Friday 21, 9h -18h

Morning: ENVA

Common 1 h course: Functional and imaging on large animals

Session 1: EMG

Session 2: Muscular strength on segments (in vivo), isolated muscle (ex vivo), isolated fibers.

Session 3: Scanner or IRM ENVA; echography.

Afternoon: Faculty of Pharmacy, Paris

Common 1 h course: reporter genes; functional evaluation and imaging (Luc, GFP, beta-gal, CPK IRM)

Rotating sessions

Session 1: Optical in vivo Imaging

Session 2: DNA Formulation

Session 3: Muscle and skin sampling for quantitative PCR

Saturday 22, 9h-11h Pharmacy University, Paris

Feed back of the work groups and overall evaluation of courses.

END of the course

The participation of young researchers is strongly encouraged especially from east EU countries and EC-funded consortia. Fellowships and discounted registration fees can be granted upon application.

More information (programme, registrations, abstract submissions and accommodations) will be available at www.moleda.org.

Contact: mezzina@genethon.fr +33 1 69 47 10 23 or +33 6 85 07 69 05