The activity of non-genetic factors early in life that result in the permanent organization or imprinting of physiological systems is known as perinatal "programming". These epigenetic insights offer new therapeutic avenues for exploration. Epigenetics also provides a means by which genetic material can respond to changing environmental conditions.

The environment can thus prompt epigenetic changes that affect future generations. Stressors occurring during critical periods of development such as perinatal life may thus play on those epigenetic mechanisms, changing the phenotype of an individual. Epigenetic gene regulation through DNA methylation and histone modifications has been shown to be a crucial mechanism for the development and function of the nervous system, ranging from cell differentiation to neuronal plasticity, from learning and memory to behaviour. Consequently, the deregulation of the epigenome could be associated with various neuropsychiatric disorders.

Aim of this Symposium is to propose an overview of the actual research in the field of programming and epigenetics by placing emphasis on recent research progresses in molecular and cellular mechanisms governing brain development/behaviour, environmentally-induced plasticity in the adult and neurodegeneration, as well as metabolic disturbances. Special attention will be given to molecular signalling mechanisms, mechanism-based therapeutic strategies and animal models.

#### **Organising Commitee/Comité d'Organisation**

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> Lab. Perinatal Stress University of Lille1

#### Speakers

- Sebastien G. Bouret
- Jocelyne Caboche
- Nicole Datson
- Tony Lefebre
- Stefania Maccari
- Jean-Claude Michalski
- Anna Moles
- **Johannes Reul**
- Jonathan Seckl
- Moshe Szyf

Scientific Commitee/Comité Scientifique

- Stefania Maccari, Lille1
- Sara Morley-Fletcher, Lille1
- Muriel Darnaudéry, Lille1
- Olivier Van Reeth, Université Libre Bruxelles
- Anna Moles, CNR Rome Italy
- Vincent Prévot, Lille2

## COLLOQUE THEMATIQUE SOCIETE DES NEUROSCIENCES

### "PROGRAMMING AND EPIGENETICS"



## Université de Lille 1 15-16 Décembre 2008

Lieu:

IAE Avenue du peuple belge Lille

http://www.programing-epigenetics-lille.univ-lille1.fr

## **Deadline October 30th**



# PROGRAMME December 15th 9:00-17:00 "Programing of the epigenome" Jonathan Seckl "Glucocorticoids, developmental 'programming' and the risk of affective dysfunction", Edinburgh University, UK Sebastien G. Bouret "Developmental Programming of Hypothalamic Feeding Circuits", University of Southern California & INSERM, USA, FR Anna Moles "What's wrong with my mother: Do maternal licking and grooming change a mouse life?", CNR Neurosciences, IT Moshe Szyf "The dynamic epigenome and early life experience", McGill University, CA Stefania Maccari "Epigenetic programming of the stress response by prenatal restraint stress", Lille1, FR December 16th 9:00-16:00 "Epigenesis of adult diseases" Nicole Datson "Glucocorticoid signalling in the brain: a target for epigenetic modulation?", Leiden University, NL Johannes Reul "Why do we remember stressful events so well? Some insights from epigenetic studies", Bristol University, UK **Jocelvne Caboche** "ERK/MSK1 signalling and chromatine remodelling in striatum: a key role for drug addiction", CNRS-UPMC ENPARIS, FR Tony Lefebre "Glycosilation and Alzheimer", UMR8576 Lille1, FR Jean-Claude Michalski "Congenital Disorders of glycosylation in the brain", UMR8576 Lille1, FR

#### International Symposium "Programming and Epigenetics" REGISTRATION FORM Last name: First name: Organization: Adress: Zip code: City: Contry: Email: Phone: Fax: Name of the accompanying person: **Registration Fees** Before October After October Category 30<sup>th</sup> (EUR) 30<sup>th</sup> (EUR) Undergraduate and PhD students<sup>∗</sup> □ 20 □ 35 Post Docs and Researchers\* **H** 40 □ 55 TOTAL **\*VAT** included Registration fee includes: Admission to Lectures, Proceedings, morning and afternoon refreshments, lunches on december 15 and december 16 PAYMENT U VISA MASTERCARD Credit Card **FUROCARD** Expiration date: |.....| CVV [.....] (control numbers) TOTAL EUR Date: Signature • Wire Transfers -**CREDIT DU NORD** Code IBAN FR76 3007 6029 0360 1591 0020 072 **BIC: NORDFRPP** Important: In case of a bank transfert, the name of the registred person and of its Company/Institution must be indicated on the transfer order

To be returned by fax to: ADRINORD, Fax: +33 (0)3 28 38 50 25 For any additional information, contact: chantal.dauthuille@adrinord.asso.fr

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