



POSTDOCTORAL POSITION 2012-2014 in Chemical Senses & Neurosciences

in the
**CSGA - Centre des Sciences du Goût et de l'Alimentation
(Food and Behaviour Research Center)**

UMR 6265 CNRS, UMR 1324 INRA, Université de Bourgogne, Agrosup Dijon
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Context and Aims:

In mammals, maternal odour signals significantly influence the feeding behaviour of newborns. However, the mode of perception of these signals in the highly complex environment remains weakly known. In particular, one may wonder about how neonates process, retain and respond to key-odorants perceived into mixtures of other odorants, or to mixtures perceived as signals by themselves. The present postdoctoral position, funded by the Agence Nationale de la Recherche (ANR) and starting from January 2012, will **determine how odour information impact the feeding behaviour (sucking and milk intake) of the young during the first postnatal days, depending on the perception of information that consist in odorants perceived in or out of mixtures, and will explore memory and brain processing that contribute to the acquisition/recall of such information.** European rabbits will constitute the animal model, a model on which we have experience since more than 10 years, and which presented interesting advantages to explore the configural versus elemental perception of complex odour stimuli (e.g. some of our recent papers - Coureaud et al. - from 2006 to 2011, published in *Current Biology*, *Physiology & Behavior*, *The Journal of Experimental Biology*, *Chemical Senses*, *The Journal of Comparative Physiology A*, *Learning and Memory*). Investigations will be conducted using ethological, chemical, neurobiological (c-fos) and neuropharmacological tools. In a scientific and social context interested by issues related to the development of behaviour and preferences, this neuro-ethological postdoc will be part of a multidisciplinary research program (collaborations with F. Datiche, T. Thomas-Danguin, G. Ferreira) aiming to the better understanding of the relationships that organisms develop with food from early in life, and of the cerebral, cognitive and behavioural mechanisms supporting the perception/memorization of the \pm complex flavour of food substrates, which contributes *in fine* to their acceptance. Results should find echoes not only for scientists from distinct areas, but also in the public health domain and for instance in food industry and flavour and fragrance companies.

The ideal candidate will hold a PhD in neuro-ethology or neurobiology, and present serious theoretical and practical knowledge related to the olfactory system and to brain exploration and imaging in animals under development.

Key-Words: Newborn, Olfactory perception, Odour mixtures, Brain imaging (c-Fos), Cognition, Behaviour

Salary: 2200€/month (free of charge)

Contact: Interested candidates should send the following documents **before September 30** via email to Dr. Gérard Coureaud (gerard.coureaud@u-bourgogne.fr), CSGA Dijon France, Developmental Ethology and Cognitive Psychology Group: i) curriculum vitae; ii) cover letter including a statement of accomplishments, research interests and motivation for the present program; iii) 3 letters of recommendation.