

<b>Job title</b>	<b>PhD: May fermented food modify oral microbiota and taste perception ? An animal study.</b>
<b>Date de mise en ligne souhaitée</b>	15/04/2019
<b>Job type (PhD, Post-doc, Engineer)</b>	PhD
<b>Contract duration (months)</b>	36 months
<b>Qualifications (Master degree, PhD...)</b>	Master degree or Engineer degree
<b>Job hours (full time/ part time)</b>	full time
<b>Employer</b>	UBFC – Université de Franche-Comté
<b>Host Laboratories</b>	UMR Centre des Sciences du Goût et de l'Alimentation (CSGA) UMR Procédés Alimentaires et Microbiologiques (PAM)
<b>URL Host Laboratory</b>	<a href="https://www2.dijon.inra.fr/csga/index_eng.php">https://www2.dijon.inra.fr/csga/index_eng.php</a>
<b>Address Host Laboratory</b>	INRA/CSGA 17 rue Sully ; 21065 Dijon Cedex ; FRANCE
<b>Job description</b>	<p><b>Host laboratories</b></p> <p>The CSGA and PAM lab are 2 research units located in Dijon (France). They are internationally well recognized for their researches on taste &amp; feeding behaviour and food science &amp; microbiology respectively. These 2 laboratories (staff of about 200 persons) have initiated a close collaboration 5 years ago on the relationships between sensory perception and oral microbiota.</p> <p><b>Scientific context</b></p> <p>Eating behaviour is a key determinant of human health. When unadapted, it can be at the origin of various pathologies affecting modern societies (e.g. obesity, cardiovascular diseases, diabetes). Among the biological factors known to influence eating behaviour, taste perception is playing an important role. Taste perception varies greatly within the population and the factors at the origin of this variability are not fully understood. Among these factors, the oral microbiota could play a major role. If the oral microbiota has been extensively studied for its implication in various oral pathologies, including mainly dental caries and periodontitis, the impact of oral microbiota in taste perception has been poorly studied until now. Recent works from our laboratory as well as from other groups increasingly suggest existing relationships between oral microbial composition and taste perception</p>

	<p>(Feng et al., 2018 ; Besnard et al., 2018 ; Cattaneo et al., 2019). However, the modulation of oral microbiota by food intake and particularly by exogenous flora provided by fermented foods has been little studied, in contrast to the gut microbiota. We make the hypothesis that a diet rich in fermented foods could modulate the oral microbiota and that this modulation could lead to the modification of oral functions such as taste perception and salivation. The aims of this PhD are:</p> <ul style="list-style-type: none"> <li>- To study the ability of fermented foods' microbiota to colonize oral cavity (tongue and saliva).</li> <li>- To study the persistence of this settlement after the end of the diet.</li> <li>- To study the impact of a diet rich in fermented foods on salivary composition (antibacterial properties).</li> <li>- To study the impact of a diet rich in fermented foods on taste sensitivity and preferences.</li> </ul> <p>This project will adopt a multidisciplinary approach including animal behaviour, microbiology, physiology, biochemistry, histology, nutrition and food sciences. The CSGA lab has the expertise and the facilities for studying chemosensory perception in human or animal, whereas the PAM lab has the expertise and the facilities for studying microorganisms in food and in relation with food intake. The PhD student will benefit from the co-supervision of two scientists, one from CSGA, specialized in biochemistry and physiology and one from PAM, specialized in microbiology.</p> <p>Besnard, P., J. E. Christensen, et al. (2018). "Obese Subjects With Specific Gustatory Papillae Microbiota and Salivary Cues Display an Impairment to Sense Lipids." <i>Scientific Reports</i> 8.</p> <p>Cattaneo, C., G. Gargari, et al. (2019). "New insights into the relationship between taste perception and oral microbiota composition." <i>Scientific Reports</i> 9.</p> <p>Feng, Y., M. Morzel, et al. (2017). Does the lingual film intervene in the perception of taste? 11th European Symposium on Saliva, Egmond aan Zee, The Netherlands.</p>
<b>Supervisor(s)</b>	NEYRAUD Eric ( <a href="mailto:eric.neyraud@inra.fr">eric.neyraud@inra.fr</a> ) LICANDRO Hélène ( <a href="mailto:helene.licandro@u-bourgogne.fr">helene.licandro@u-bourgogne.fr</a> )
<b>Candidate profile</b>	Master degree in animal behaviour, animal physiology, microbiology or relevant field Excellent skill for multidisciplinary approach A previous successful experience in experimentation on animal would be an asset.
<b>Keywords</b>	Oral microbiota, oral biology, fermented foods, taste perception, rat
<b>Application deadline</b>	May 24 <sup>th</sup> 2019
<b>Starting Job</b>	October 1 <sup>st</sup> 2019



<p><b>Application</b> <i>Depending on the type of position</i></p>	<p><b>PhD Position</b></p> <p>Please send the following documents (all in one PDF file) by e-mail to <a href="mailto:job-application@ubfc.fr">job-application@ubfc.fr</a>:</p> <ol style="list-style-type: none"><li>1) For EU candidates: Copy of your national ID card or of your passport page where your photo is printed. For non-EU candidates: Copy of your passport page where your photo is printed.</li><li>2) Curriculum Vitae (1 page).</li><li>3) Letter of motivation relatively to the position (1 page).</li><li>4) Copy of your Master degree and/or Engineer degree if already available.</li><li>5) Copy of your final marks and ranks.</li><li>6) Coordinates of reference persons (maximum 3, at least your master thesis supervisor): Title, Name, organization, e-mail.</li></ol> <p>If you have questions regarding the application, please contact the supervisors.</p>
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