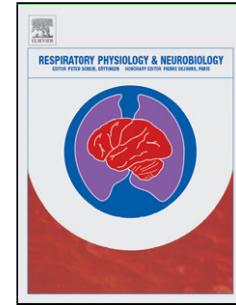


Accepted Manuscript

Title: Participation of locus coeruleus in breathing control in female rats

Authors: Débora de Carvalho, Luis Gustavo A. Patrone, Danuzia A. Marques, Mariane C. Vicente, Raphael E. Szawka, Janete A. Anselmo-Franci, Kênia C. Bicego, Luciane H. Gargaglioni



PII: S1569-9048(16)30258-0
DOI: <http://dx.doi.org/doi:10.1016/j.resp.2017.06.008>
Reference: RESPNB 2826

To appear in: *Respiratory Physiology & Neurobiology*

Received date: 1-11-2016
Revised date: 21-6-2017
Accepted date: 23-6-2017

Please cite this article as: {<http://dx.doi.org/>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Participation of locus coeruleus in breathing control in female rats

Débora de Carvalho^{1,2}, Luis Gustavo A. Patrone¹, Danuzia A. Marques¹,
Mariane C. Vicente¹, Raphael E. Szawka³, Janete A. Anselmo-Franci⁴,
Kênia C. Bicego¹, Luciane H. Gargaglioni^{1*}

¹Department of Animal Morphology and Physiology, Sao Paulo State University – UNESP/ FCAV at Jaboticabal, SP, Brazil; ²Federal Institute of Education, Science and Technology – IFPA at Tucuruí, PA, Brazil; ³Department of Physiology and Biophysics, Institute of Biological Sciences, Federal University of Minas Gerais – UFMG at Belo Horizonte, MG, Brazil; ⁴Department of Stomatology, Morphology and Physiology, FORP-University of Sao Paulo at Ribeirao Preto, SP, Brazil.

*Corresponding Author: Via de acesso Paulo Donato Castellane s/n, 14870-000, Departamento de Morfologia e Fisiologia Animal, Faculdade de Ciências Agrárias e Veterinárias, Universidade Estadual Paulista Júlio de Mesquita Filho, Jaboticabal, SP, Brasil. Telephone: 55 16 32092656. Telefax: 55 16 32024275. E-mail: lucihel@fcav.unesp.br.

Highlights

- LC noradrenergic neurons of intact female rats exert an excitatory role in the hypercapnic ventilatory response.
- LC noradrenergic neurons of ovariectomized female rats provide a tonic excitatory drive to maintain breathing frequency.
- Ovariectomy decreased CO₂ chemosensitivity and no further ventilation reduction is observed after LC lesion.

Abstract

Several evidences indicate that the locus coeruleus (LC) is involved in central chemoreception responding to CO₂/pH and displaying a high percentage of chemosensitive neurons (> 80%). However, there are no studies about the LC-mediated hypercapnic ventilation performed in females. Therefore, we assessed the role of

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات