Maternal high-fat diet induces sex-specific endocannabinoid system changes in newborn rats and programs adiposity, energy expenditure and food preference in adulthood

Camilla P. Dias-Rocha, Mariana M. Almeida, Erika M. Santana, Julia C.B. Costa, Juliana G. Franco, Carmen C. Pazos-Moura, Isis H. Trevenzoli

PII: S0955-2863(17)30304-2
DOI: doi: 10.1016/j.jnutbio.2017.09.019
Reference: JNB 7855

To appear in: *The Journal of Nutritional Biochemistry*

Received date: 4 April 2017
Accepted date: 28 September 2017

Please cite this article as: Dias-Rocha Camilla P., Almeida Mariana M., Santana Erika M., Costa Julia C.B., Franco Juliana G., Pazos-Moura Carmen C., Trevenzoli Isis H., Maternal high-fat diet induces sex-specific endocannabinoid system changes in newborn rats and programs adiposity, energy expenditure and food preference in adulthood, *The Journal of Nutritional Biochemistry* (2017), doi: 10.1016/j.jnutbio.2017.09.019

Maternal high-fat diet induces sex-specific endocannabinoid system changes in newborn rats and programs adiposity, energy expenditure and food preference in adulthood

Camilla P. Dias-Rocha*[1], Mariana M. Almeida*[1], Erika M. Santana[1], Julia C. B. Costa[1], Juliana G. Franco[1], Carmen C. Pazos-Moura[1], Isis H. Trevenzoli[1]

*These authors contributed equally to this work.

[1]Instituto de Biofísica Carlos Chagas Filho, Universidade Federal do Rio de Janeiro, RJ, Brazil

Corresponding author:

Isis Hara Trevenzoli, PhD, Assistant Professor

haraisis@biof.ufrj.br

Phone number: +55 21 3938-6535

Laboratory of Molecular Endocrinology

Carlos Chagas Filho Biophysis Institute

Federal University of Rio de Janeiro

Av. Carlos Chagas Filho, 373

21941-902. Rio de Janeiro, Brazil

Running Title: *Endocannabinoid system and metabolic programming*

Keywords: high-fat diet; programming; endocannabinoid system; brown adipose tissue; hypothalamus; leptin.

This study was supported by the Carlos Chagas Filho Research Foundation of the State of Rio de Janeiro (FAPERJ; E-26/202.816/2015), Coordination for the Enhancement of Higher Education Personnel (CAPES) and National Council for Scientific and Technological Development (CNPq; 473807/2013-0), Brazil.

The authors have nothing to disclose.