

# Accepted Manuscript

The influence of hypoxia and IFN- $\gamma$  on the proteome and metabolome of therapeutic mesenchymal stem cells

Holly M. Wobma, Manuel A. Tamargo, Shahar Goeta, Lewis M. Brown, Raimon Duran-Struuck, Gordana Vunjak-Novakovic



PII: S0142-9612(18)30194-7

DOI: [10.1016/j.biomaterials.2018.03.027](https://doi.org/10.1016/j.biomaterials.2018.03.027)

Reference: JBMT 18553

To appear in: *Biomaterials*

Received Date: 8 March 2018

Accepted Date: 13 March 2018

Please cite this article as: Wobma HM, Tamargo MA, Goeta S, Brown LM, Duran-Struuck R, Vunjak-Novakovic G, The influence of hypoxia and IFN- $\gamma$  on the proteome and metabolome of therapeutic mesenchymal stem cells, *Biomaterials* (2018), doi: [10.1016/j.biomaterials.2018.03.027](https://doi.org/10.1016/j.biomaterials.2018.03.027).

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.

# The influence of hypoxia and IFN- $\gamma$ on the proteome and metabolome of therapeutic mesenchymal stem cells

Holly M. Wobma<sup>1</sup>, Manuel A. Tamargo<sup>1</sup>, Shahar Goeta<sup>2</sup>, Lewis M. Brown<sup>2</sup>, Raimon Duran-Struuck<sup>3</sup>,  
Gordana Vunjak-Novakovic<sup>1,4</sup> #

<sup>1</sup> *Department of Biomedical Engineering, Columbia University, New York, NY, USA*

<sup>2</sup> *Quantitative Proteomics and Metabolomics Center, Columbia University, New York, NY, USA*

<sup>3</sup> *Department of Pathobiology, University of Pennsylvania, Philadelphia, PA, USA*

<sup>4</sup> *Department of Medicine, Columbia University, New York, NY, USA*

# Correspondence should be addressed to G.V-N. ([gv2131@columbia.edu](mailto:gv2131@columbia.edu))

Work was performed at Columbia University in the City of New York, NY, USA

**Corresponding author:** Gordana Vunjak-Novakovic; VC-12 234, 622W 168<sup>th</sup>St, New York, NY, USA,  
10032; Tel: 1-212-305-2304; Fax: 1-212-305-4692; [gv2131@columbia.edu](mailto:gv2131@columbia.edu)

**Keywords:** mesenchymal stem cell, priming, hypoxia, interferon-gamma, proteome, metabolome,  
extracellular matrix, immune, survival

Download English Version:

<https://daneshyari.com/en/article/6484547>

Download Persian Version:

<https://daneshyari.com/article/6484547>

[Daneshyari.com](https://daneshyari.com)