Author's Accepted Manuscript

Large strain stimulation promotes extracellular matrix production and stiffness in an elastomeric scaffold model

Antonio D'Amore, Joao Soares, John A. Stella, Will Zhang, Nicholas J. Amoroso, John E. Mayer, Jr., William R. Wagner, Michael S. Sacks



 PII:
 S1751-6161(16)30123-0

 DOI:
 http://dx.doi.org/10.1016/j.jmbbm.2016.05.005

 Reference:
 JMBBM1917

To appear in: Journal of the Mechanical Behavior of Biomedical Materials

Received date: 6 January 2016 Revised date: 30 April 2016 Accepted date: 3 May 2016

Cite this article as: Antonio D'Amore, Joao Soares, John A. Stella, Will Zhang Nicholas J. Amoroso, John E. Mayer, Jr., William R. Wagner and Michael S. Sacks, Large strain stimulation promotes extracellular matrix production and stiffness in an elastomeric scaffold model, *Journal of the Mechanical Behavio of Biomedical Materials*, http://dx.doi.org/10.1016/j.jmbbm.2016.05.005

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable 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

ACCEPTED MANUSCRIPT

LARGE STRAIN STIMULATION PROMOTES EXTRACELLULAR MATRIX PRODUCTION AND STIFFNESS IN AN ELASTOMERIC SCAFFOLD MODEL

Antonio D'Amore^{1,2,3,*}, Joao Soares^{4,*}, John A. Stella¹, Will Zhang⁴, Nicholas J. Amoroso¹, John E. Mayer, Jr.⁵, William R. Wagner^{1,} and Michael S. Sacks^{4,**}

¹Department of Bioengineering McGowan Institute for Regenerative Medicine, University of Pittsburgh, Pittsburgh, PA USA

²Fondazione RiMED, Italy ³DICGIM, Università di Palermo, Italy

⁴Center for Cardiovascular Simulation Institute for Computational Engineering and Sciences Department of Biomedical Engineering The University of Texas at Austin, Austin TX USA

⁵Department of Cardiac Surgery Boston Children's Hospital and Harvard Medical School Boston, MA USA

Current 4/28/2016

Re-submitted to JMBBM

*Equal contribution as first authors

**For correspondence:
Michael S. Sacks, Ph.D.
W. A. "Tex" Moncrief, Jr. Simulation-Based Engineering Science Chair I 201 East 24th Street, One University Station, C0200
The University of Texas at Austin
Austin TX 78712
Tel: 512-232-7773
Fax: 512-232-7508
email: msacks@ices.utexas.edu

Download English Version:

https://daneshyari.com/en/article/7207856

Download Persian Version:

https://daneshyari.com/article/7207856

Daneshyari.com