

## Accepted Manuscript

Effects of mechanical loading on cortical defect repair using a novel mechanobiological model of bone healing

Chao Liu, Robert Carrera, Vittoria Flamini, Lena Kenny, Pamela Cabahug-Zuckerman, Benson M. George, Daniel Hunter, Bo Liu, Gurpreet Singh, Philipp Leucht, Kenneth A. Mann, Jill A. Helms, Alesha B. Castillo



PII: S8756-3282(17)30487-8  
DOI: <https://doi.org/10.1016/j.bone.2017.12.027>  
Reference: BON 11516  
To appear in: *Bone*  
Received date: 20 April 2015  
Revised date: 20 December 2017  
Accepted date: 29 December 2017

Please cite this article as: Chao Liu, Robert Carrera, Vittoria Flamini, Lena Kenny, Pamela Cabahug-Zuckerman, Benson M. George, Daniel Hunter, Bo Liu, Gurpreet Singh, Philipp Leucht, Kenneth A. Mann, Jill A. Helms, Alesha B. Castillo , Effects of mechanical loading on cortical defect repair using a novel mechanobiological model of bone healing. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. *Bone*(2017), <https://doi.org/10.1016/j.bone.2017.12.027>

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.

**Effects of mechanical loading on cortical defect repair using a novel  
mechanobiological model of bone healing**

Chao Liu<sup>a,b,c</sup>, Robert Carrera<sup>d</sup>, Vittoria Flamini<sup>a</sup>, Lena Kenny<sup>b</sup>, Pamela Cabahug-  
Zuckerman<sup>a,b,c</sup>, Benson M. George<sup>e</sup>, Daniel Hunter<sup>e</sup>, Bo Liu<sup>e</sup>, Gurpreet Singh<sup>e</sup>, Philipp  
Leucht<sup>b,f</sup>, Kenneth A. Mann<sup>g</sup>, Jill A. Helms<sup>e</sup>, Alesha B. Castillo<sup>a,b,c</sup>

<sup>a</sup>Department of Mechanical and Aerospace Engineering, New York University, Brooklyn, NY, USA

<sup>b</sup>Department of Orthopaedic Surgery, New York University Langone Health, NYU Langone Orthopedic Hospital, NY, USA

<sup>c</sup>Department of Veterans Affairs New York Harbor Healthcare System, New York, NY, USA

<sup>d</sup>Department of Bioengineering, Stanford University, Stanford, CA, USA

<sup>e</sup>Department of Surgery, Division of Plastic Surgery, Stanford University, Stanford, CA, USA

<sup>f</sup>Department of Cell Biology, New York University, New York, NY, USA

<sup>g</sup>Department of Orthopedic Surgery, SUNY Upstate Medical University, Syracuse, NY, USA

Corresponding author:

Alesha B. Castillo, PhD

Assistant Professor

NYU Bioengineering Institute

433 First Avenue, 9<sup>th</sup> Floor, Room 908

New York University

Email: alesha.castillo@nyu.edu

Download English Version:

<https://daneshyari.com/en/article/8625136>

Download Persian Version:

<https://daneshyari.com/article/8625136>

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