## **Accepted Manuscript**

Electromechanical Properties of Human Osteoarthritic and Asymptomatic Articular Cartilage are Sensitive and Early Detectors of Degeneration

I.Hadjab, S. Sim, S.S. Karhula, S. Kauppinen, M. Garon, E. Quenneville, P. Lavigne, P.P. Lehenkari, S. Saarakkala, M.D. Buschmann

PII: \$1063-4584(17)31357-2

DOI: 10.1016/j.joca.2017.12.002

Reference: YJOCA 4130

To appear in: Osteoarthritis and Cartilage

Received Date: 25 April 2017

Revised Date: 18 November 2017 Accepted Date: 4 December 2017

Please cite this article as: I.Hadjab Sim S, Karhula SS, Kauppinen S, Garon M, Quenneville E, Lavigne P, Lehenkari PP, Saarakkala S, Buschmann MD, Electromechanical Properties of Human Osteoarthritic and Asymptomatic Articular Cartilage are Sensitive and Early Detectors of Degeneration, *Osteoarthritis and Cartilage* (2018), doi: 10.1016/j.joca.2017.12.002.

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.



## ACCEPTED MANUSCRIPT

1	Electromechanical Properties of Human Osteoarthritic and Asymptomatic Articular
2	Cartilage are Sensitive and Early Detectors of Degeneration
3	I.Hadjab <sup>1,2</sup> , S. Sim <sup>1,2</sup> , S.S. Karhula <sup>3,4</sup> , S. Kauppinen <sup>3</sup> , M. Garon <sup>2</sup> , E. Quenneville <sup>2</sup> , P. Lavigne <sup>5</sup> ,
4	P.P. Lehenkari <sup>3,6</sup> , S. Saarakkala <sup>3,7,8</sup> , and M.D. Buschmann <sup>1*</sup>
5	<sup>1</sup> Biomedical Engineering Institute, Polytechnique Montreal, Montreal, QC, Canada;
6	<sup>2</sup> Biomomentum Inc., 970 Michelin St., Suite 200, Laval, Quebec H7L 5C1, Canada; <sup>3</sup> Research
7	Unit of Medical Imaging, Physics and Technology, Faculty of Medicine, University of Oulu
8	<sup>4</sup> Infotech Oulu, University of Oulu, Finland <sup>5</sup> Department of Surgery, University of Montreal,
9	Montreal, QC, Canada; <sup>6</sup> Department of Surgery and Intensive Care, University of Oulu and Oulu
LO	University Hospital, Finland; <sup>7</sup> Department of Diagnostic Radiology, Oulu University Hospital,
l1	Oulu, Finland; <sup>8</sup> Medical Research Center Oulu, Oulu University Hospital and University of
12	Oulu, Finland
L3	
L4	Running Title: Performance of Electromechanical Properties in Early OA Degeneration
<b>L</b> 5	Email addresses of all contributors:
L6	Insaf Hadjab: insaf.hadjab@polymtl.ca
L7	Sotcheadt Sim: sotcheadt.sim@polymtl.ca
L8	Sakari S. Karhula: Sakari.Karhula@oulu.fi
L9	Sami Kauppinen: sami.kauppinen@oulu.fi
20	Martin Garon: garon@biomomentum.com
21	Eric Quenneville: quenneville@biomomentum.com

## Download English Version:

## https://daneshyari.com/en/article/8741681

Download Persian Version:

https://daneshyari.com/article/8741681

<u>Daneshyari.com</u>