

Accepted Manuscript

Title: Accumulation and localization of macrophage phenotypes with human intervertebral disc degeneration

Author: Kenneth R. Nakazawa, Benjamin A. Walter, Damien M. Laudier, Divya Krishnamoorthy, Grace E. Mosley, Kara L. Spiller, James C. Iatridis

PII: S1529-9430(17)31048-3
DOI: <https://doi.org/doi:10.1016/j.spinee.2017.09.018>
Reference: SPINEE 57508

To appear in: *The Spine Journal*

Received date: 2-12-2016
Revised date: 18-9-2017
Accepted date: 26-9-2017

Please cite this article as: Kenneth R. Nakazawa, Benjamin A. Walter, Damien M. Laudier, Divya Krishnamoorthy, Grace E. Mosley, Kara L. Spiller, James C. Iatridis, Accumulation and localization of macrophage phenotypes with human intervertebral disc degeneration, *The Spine Journal* (2017), <https://doi.org/doi:10.1016/j.spinee.2017.09.018>.

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.



Accumulation and Localization of Macrophage Phenotypes with Human Intervertebral Disc Degeneration

Kenneth R. Nakazawa,¹ Benjamin A. Walter,² Damien M. Laudier,¹ Divya Krishnamoorthy,¹ Grace E. Mosley,¹ Kara L. Spiller,³ James C. Iatridis¹

¹ Leni and Peter W. May Department of Orthopaedics, Icahn School of Medicine at Mount Sinai, New York, NY

² Spine Research Institute, Department of Biomedical Engineering, The Ohio State University, Columbus, OH

³ School of Biomedical Engineering, Science, and Health Systems, Drexel University, Philadelphia, PA

Kenneth R. Nakazawa, BS

Department of Orthopaedics, Icahn School of Medicine at Mount Sinai, 1 Gustave Levy Place, Box 1188, New York, NY 10029-6574; 212-241-1517; kenneth.nakazawa@icahn.mssm.edu

Benjamin A. Walter, PhD

Department of Biomedical Engineering, The Ohio State University, 140 Baker Systems Engineering, 1971 Neil Ave, Columbus, OH 43210; 614-292-2016; walter.367@osu.edu

Damien M. Laudier, BS

Department of Orthopaedics, Icahn School of Medicine at Mount Sinai, 1 Gustave Levy Place, Box 1188, New York, NY 10029-6574; 212-241-1517; damien.laudier@mssm.edu

Divya Krishnamoorthy, PhD

Department of Orthopaedics, Icahn School of Medicine at Mount Sinai, 1 Gustave Levy Place, Box 1188, New York, NY 10029-6574; 212-241-1517; divya.krishnamoorthy@mountsinai.org

Grace E. Mosley, BS

Department of Orthopaedics, Icahn School of Medicine at Mount Sinai, 1 Gustave Levy Place, Box 1188, New York, NY 10029-6574; 212-241-1517; grace.mosley@icahn.mssm.edu

Kara M. Spiller, PhD

School of Biomedical Engineering, Science and Health Systems, Drexel University, 3141 Chestnut Street, Philadelphia, PA 19104; 215.895.2215; kls35@drexel.edu

Corresponding Author:

James C. Iatridis, PhD

Leni and Peter W. May Department of Orthopaedics, Icahn School of Medicine at Mount Sinai, 1 Gustave Levy Place, Box 1188, New York, NY 10029-6574; 212-241-1517; james.iatridis@mssm.edu

Running title: Macrophage Phenotypes in Disc Degeneration

Download English Version:

<https://daneshyari.com/en/article/8804585>

Download Persian Version:

<https://daneshyari.com/article/8804585>

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