

Author's Accepted Manuscript

Characterization of the bone-metal implant interface by Digital Volume Correlation of *in-situ* loading using neutron tomography

Sophie Le Cann, Erika Tudisco, Christina Perdikouri, Ola Belfrage, Anders Kaestner, Stephen Hall, Magnus Tägil, Hanna Isaksson



PII: S1751-6161(17)30287-4
DOI: <http://dx.doi.org/10.1016/j.jmbbm.2017.07.001>
Reference: JMBBM2400

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

Received date: 30 March 2017
Revised date: 19 June 2017
Accepted date: 1 July 2017

Cite this article as: Sophie Le Cann, Erika Tudisco, Christina Perdikouri, Ola Belfrage, Anders Kaestner, Stephen Hall, Magnus Tägil and Hanna Isaksson: Characterization of the bone-metal implant interface by Digital Volume Correlation of *in-situ* loading using neutron tomography, *Journal of the Mechanical Behavior of Biomedical Materials*, <http://dx.doi.org/10.1016/j.jmbbm.2017.07.001>

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 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.

Characterization of the bone-metal implant interface by Digital Volume Correlation of *in-situ* loading using neutron tomography

Sophie Le Cann ^{a*}, Erika Tudisco ^b, Christina Perdikouri ^a, Ola Belfrage ^c, Anders
Kaestner ^d, Stephen Hall ^e, Magnus Tägil ^c, Hanna Isaksson ^{a,c}

^a Department of Biomedical Engineering, Lund University, Sweden.

^b Division of Geotechnical engineering, Lund University, Sweden.

^c Department of Orthopaedics, Lund University, Sweden.

^d Swiss Spallation Source, Paul Sheerer Institute, Switzerland.

^e Division of Solid Mechanics, Lund University, Sweden.

sophie.le_cann@bme.lth.se

cperdik@gmail.com

hanna.isaksson@bme.lth.se

erika.tudisco@construction.lth.se

olabelfrage@yahoo.com

magnus.tagil@med.lu.se

anders.kaestner@psi.ch

stephen.hall@solid.lth.se

* Corresponding author: Sophie Le Cann, PhD. Department of Biomedical Engineering, Lund University, Box 118, 22100 Lund, Sweden

Download English Version:

<https://daneshyari.com/en/article/5020477>

Download Persian Version:

<https://daneshyari.com/article/5020477>

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