

## Accepted Manuscript

### Modification of a Three-Compartment Muscle Fatigue Model to Predict Peak Torque Decline During Intermittent Tasks

John M Looft, Nicole Herkert, Laura Frey-Law

PII: S0021-9290(18)30434-2

DOI: <https://doi.org/10.1016/j.jbiomech.2018.06.005>

Reference: BM 8743

To appear in: *Journal of Biomechanics*

Accepted Date: 9 June 2018



Please cite this article as: J.M. Looft, N. Herkert, L. Frey-Law, Modification of a Three-Compartment Muscle Fatigue Model to Predict Peak Torque Decline During Intermittent Tasks, *Journal of Biomechanics* (2018), doi: <https://doi.org/10.1016/j.jbiomech.2018.06.005>

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.

**Original Article:****Modification of a Three-Compartment Muscle Fatigue Model to Predict Peak Torque Decline During Intermittent Tasks**

<sup>1,2</sup>John M Looft PHD, <sup>2</sup>Nicole Herkert, <sup>2</sup>Laura Frey-Law, DPT, PHD

<sup>1</sup>Department of Physical Therapy, University of Minnesota, Minneapolis, MN, 55455, USA

<sup>2</sup>Department of Physical Therapy and Rehabilitation Science, University of Iowa, Iowa City, IA, 52242, USA

Address for correspondence

Laura Frey-Law

Department of Physical Therapy and Rehabilitation

1-252 Medical Education Bldg.

University of Iowa

Iowa City, Iowa 52242, USA

Phone: 319-335-9804

Fax: 319-335-9707

Email: [laura-freylaw@uiowa.edu](mailto:laura-freylaw@uiowa.edu)

Keywords: Muscle Fatigue, Isometric Contraction, Meta-analysis, Mathematical Modeling, Ergonomics

**Abstract**

This study aimed to test whether adding a rest recovery parameter,  $r$ , to the analytical three-compartment controller (3CC) fatigue model (Xia and Frey Law, 2008) will improve fatigue estimates during intermittent

Download English Version:

<https://daneshyari.com/en/article/7235554>

Download Persian Version:

<https://daneshyari.com/article/7235554>

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