

# Accepted Manuscript

Advancement of Surgical Visualization Methods: A Comparison Study between Traditional Microscopic Surgery and a Novel Robotic Optoelectronic Visualization Tool for Spinal Surgery

Marc D. Moisi, MD, Kimberly Hoang, MD, R. Shane Tubbs, PhD, Jeni Page, NP, Christian Fisahn, MD, David Paulson, MD, Shiveindra Jeyamohan, MD, Johnny Delashaw, MD, David Hanscom, MD, Rod J. Oskouian, MD, Jens Chapman, MD

PII: S1878-8750(16)31147-0

DOI: [10.1016/j.wneu.2016.11.003](https://doi.org/10.1016/j.wneu.2016.11.003)

Reference: WNEU 4813

To appear in: *World Neurosurgery*

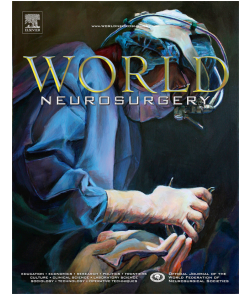
Received Date: 24 August 2016

Revised Date: 30 October 2016

Accepted Date: 1 November 2016

Please cite this article as: Moisi MD, Hoang K, Tubbs RS, Page J, Fisahn C, Paulson D, Jeyamohan S, Delashaw J, Hanscom D, Oskouian RJ, Chapman J, Advancement of Surgical Visualization Methods: A Comparison Study between Traditional Microscopic Surgery and a Novel Robotic Optoelectronic Visualization Tool for Spinal Surgery, *World Neurosurgery* (2016), doi: 10.1016/j.wneu.2016.11.003.

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.



**Advancement of Surgical Visualization Methods: A Comparison Study between Traditional Microscopic Surgery and a Novel Robotic Optoelectronic Visualization Tool for Spinal Surgery**

Authors:

Marc D. Moisi, MD<sup>1,2</sup>, Kimberly Hoang, MD<sup>3</sup>, R. Shane Tubbs, PhD<sup>2</sup>, Jeni Page, NP<sup>1</sup>, Christian Fisahn, MD<sup>1,2,4</sup>, David Paulson, MD<sup>1</sup>, Shiveindra Jeyamohan, MD<sup>1</sup>, Johnny Delashaw, MD<sup>1</sup>, David Hanscom, MD<sup>1</sup>, Rod J. Oskouian, MD<sup>1</sup>, Jens Chapman, MD<sup>1</sup>

<sup>1</sup> Swedish Neuroscience Institute, Swedish Medical Center, Seattle, Washington, United States

<sup>2</sup> Seattle Science Foundation, Seattle, Washington, United States

<sup>3</sup> Duke University Medical Center, Durham, North Carolina, United States

<sup>4</sup> Department of Trauma Surgery, BG University Hospital Bergmannsheil, Ruhr University Bochum, Bürkle-de-la-Camp-Platz 1, 44789, Bochum, Germany

<sup>5</sup> Spectrum Research, Inc., Tacoma, Washington, United States

**Running Title: A Novel Robotic Optoelectronic Visualization Tool for Spinal Surgery**

**Address Correspondence to:**

Marc D. Moisi, M.D.  
550 17<sup>th</sup> Ave  
Seattle, WA 98122  
Phone: 206-320-3470  
Fax: 206-320-6224  
[moisimd@aol.com](mailto:moisimd@aol.com)

Download English Version:

<https://daneshyari.com/en/article/5634932>

Download Persian Version:

<https://daneshyari.com/article/5634932>

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