In accordance with the University of Tennessee Health Science Center Honor Code and the requirements for integrity and honesty laid out in the College of Graduate Health Sciences’ Electronic Thesis & Dissertation (ET/D) Learning Portal, I, Daniel Hoyer, declare that this thesis titled “Validation Testing of a Synthetic Spine and Upgraded Protocol for a Biomechanical Evaluation of a Lumbar Spinal Orthosis” and the work presented therein are my own. I confirm that:

● This work was done wholly or mainly while being a candidate for a terminal degree at the University of Tennessee Health Science Center.

● There is clear and full disclosure in the thesis for any part that was previously submitted for a degree or any other qualification at this University or any other institution or that has been accepted for publication.

● Where I used the published or unpublished work of others, this is clearly attributed.

● Where I have quoted or paraphrased text or have reprinted or modified images, tables, or other data from the work of others, the source is always given, and quotation marks are used for text, following fair use guidelines. Except for such acknowledged instances, this thesis is entirely my own work.

● I have acknowledged all other main sources of help (e.g., lab assistance, joint work on projects, consultations/discussions with colleagues/experts, funding).

● Where the thesis is based on work done jointly with others, I have made clear what I contributed (see next page).

Student Name: Daniel Hoyer
Advisor Name: Denis J. DiAngelo, Ph.D.
Declaration of Personal Contributions to Previously Published Articles
with Several Authors Incorporated into the ET/D
(This also includes in press and accepted articles.)

Please provide below the Chapter number of the incorporated article(s), the List of References citation, and your significant contributions as first or second author, or indicate Not Applicable. If part of your accepted submission to the journal was a statement of author contributions, you may quote that and at the end indicate [As submitted and accepted by Journal title.]

If this declaration is not applicable, please indicate here:

Articles with several authors incorporated into my ET/D and my contributions to them:

- **Chapter 3**
- **Citation:** D. J. Diangelo, Hoyer, D., Chung, C., "Biomechanical evaluation of a full-length (T12-S) synthetic lumbar spine model," MOJ Applied Bionics and Biomechanics, vol. 3, 2019.
- **My significant contributions:** Methodology, Software, Formal Analysis, Data Curation, Writing – Original Draft as well as Review & Editing, Visualization
Collection

Users can Collect posts into a printable, sortable format. Collections are a good way to organize posts for quick reading. A Collection must be created to tag posts. More Help