

Department of Radiology & Medical Imaging

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Dear Dr. Richard White,

I am pleased to submit an original article concerning our widely used software ecosystem entitled "ANTsX: A dynamic ecosystem for quantitative biological and medical imaging" for consideration for publication in Scientific Reports. Software tools, particularly those that are open-source, are important for medical research and the ANTsX ecosystem has evolved over the last 15 years to become one of the top computational resources for medical image analysts. In this work, we focus on the effectiveness of these tools through the estimation of cortical thickness which has been widely used to investigate both pathological and developmental processes. This evaluation builds on previously published large-scale evaluations of cortical thickness measurements in both cross-sectional (Tustison, et al., "Large-scale evaluation of ANTs and FreeSurfer cortical thickness measurements," NeuroImage 2014) and longitudinal (Tustison, et al., "Longitudinal mapping of cortical thickness measurements: An Alzheimer's Disease Neuroimaging Initiative-based evaluation study," Journal of Alzheimer's Disease 2019).

This manuscript has not been published and is not under consideration for publication elsewhere. All authors have contributed to the work and agree with the presented findings. We have no conflicts of interest to disclose.

Thank you for your consideration,

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