Multi-Domain Finite Element Meshing for Parotid Acinar Cell Modeling and Simulation

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March 29, 2017

Keywords

multi-domain meshing, volumetric mesh, finite element modeling, parotid acinar cells.

Abstract

350 words maximum.

1 Introduction

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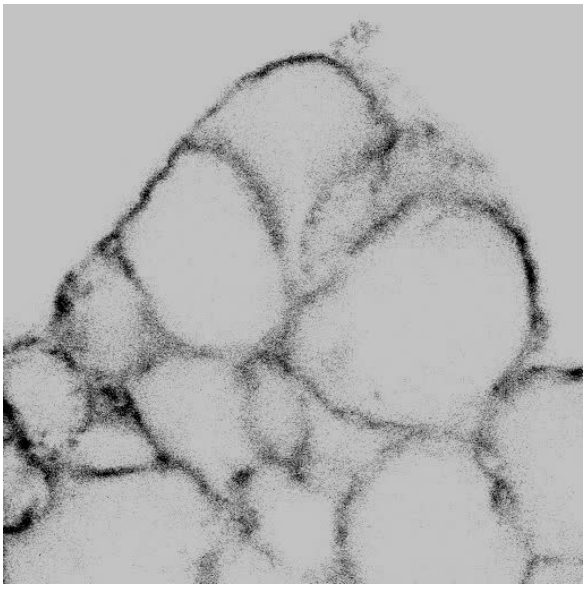
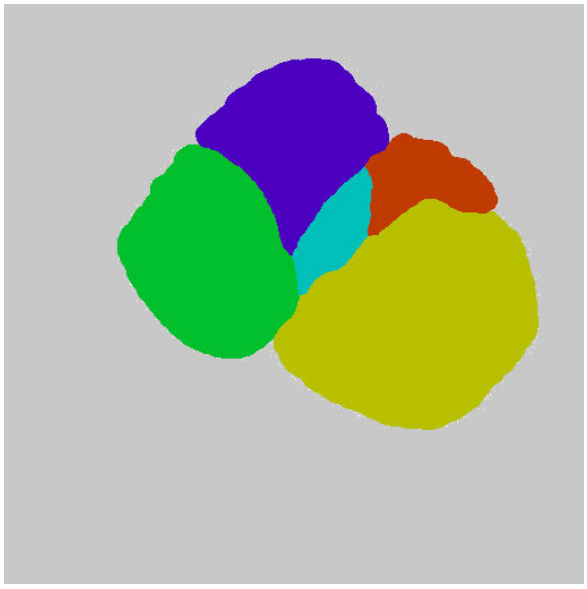
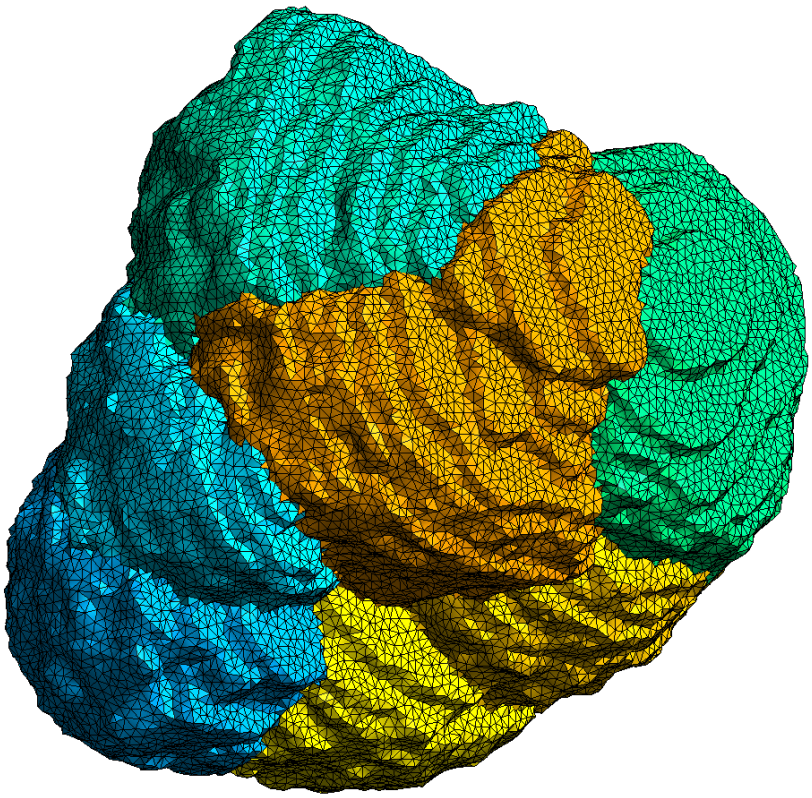
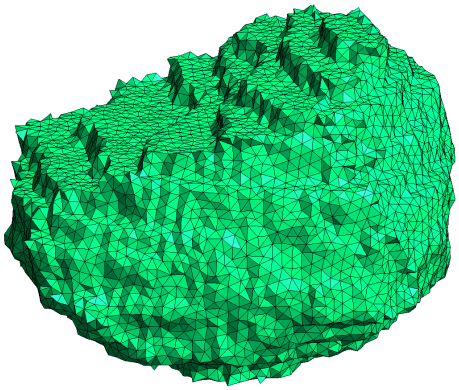


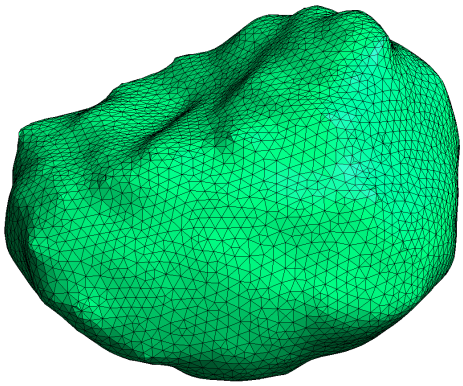


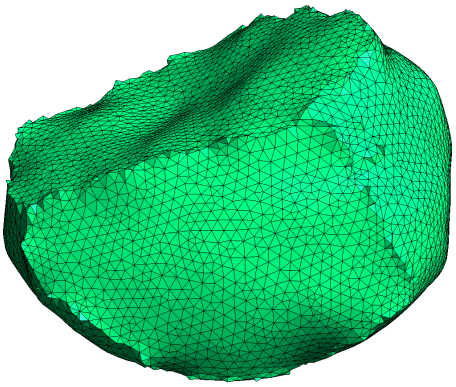
2 Design Considerations

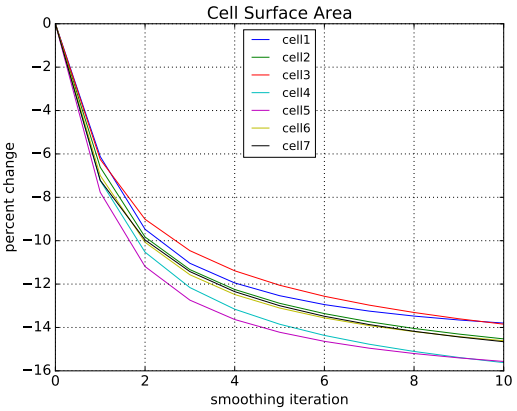
3 Description of Method

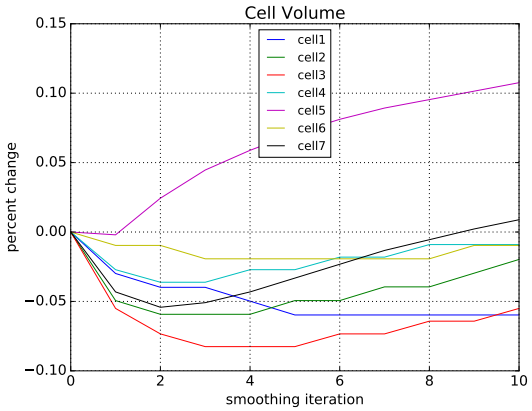









Cell Surface Area
percent change
smoothing iteration
cell1
cell2
cell3
cell4
cell5
cell6
cell7
0
−2
−4
−6
−8
−10
−12
−14
−16
0
2
4
6
8
10


Cell Volume
percent change
smoothing iteration
cell1
cell2
cell3
cell4
cell5
cell6
cell7
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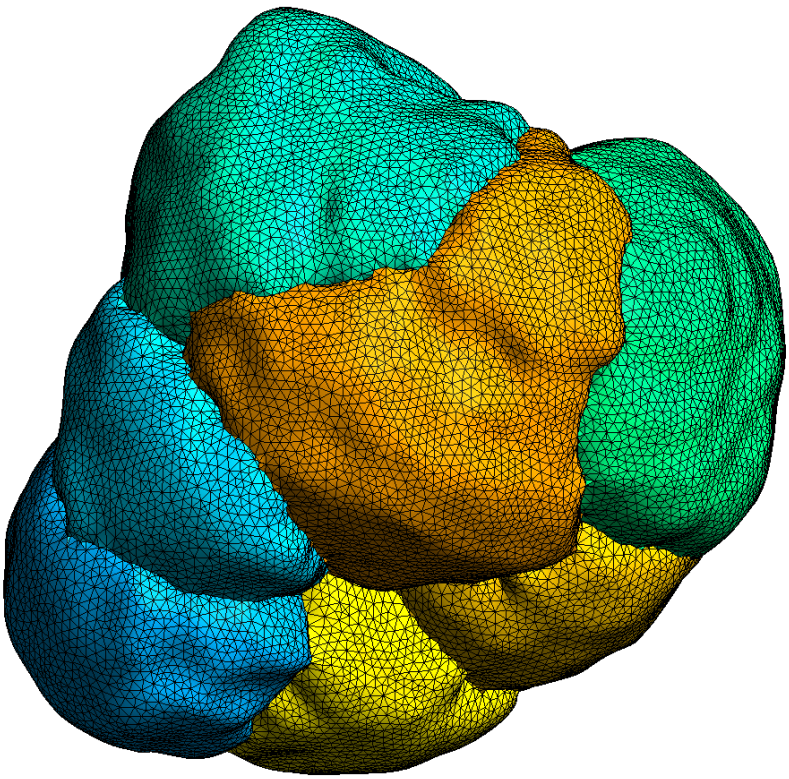
0.10
0.05
0.00
−0.05
−0.10
0
2
4
6
8
10

4 Results



5 Discussion

6 Conclusion and Future Plans

7 Acknowledgements

This work was supported by the National Institutes of Health grant number 5R01DE019245.

8 References