

Accepted Manuscript

Modelling the period-average transport of species within pulsatile blood flow

Sargon A. Gabriel, Yan Ding, Yuqing Feng

PII: S0022-5193(18)30330-8
DOI: <https://doi.org/10.1016/j.jtbi.2018.07.006>
Reference: YJTBI 9531



To appear in: *Journal of Theoretical Biology*

Received date: 13 November 2017
Revised date: 31 May 2018
Accepted date: 6 July 2018

Please cite this article as: Sargon A. Gabriel, Yan Ding, Yuqing Feng, Modelling the period-average transport of species within pulsatile blood flow, *Journal of Theoretical Biology* (2018), doi: <https://doi.org/10.1016/j.jtbi.2018.07.006>

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.

Highlights

- Blood flow pulsatility induces oscillatory disturbances in the transport of species
- Disturbances can cause the period-average transport to differ from its steady-state
- The OKEI and OSAFI are used to identify the spatial distribution of disturbances
- The RPA model is developed to compute the period-average of species transport
- The RPA model approximates the period-average better than the steady-state model

Download English Version:

<https://daneshyari.com/en/article/10138703>

Download Persian Version:

<https://daneshyari.com/article/10138703>

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