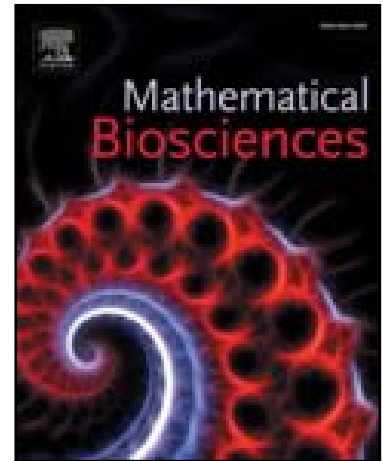


A mathematical model for cell infiltration and proliferation in a chondral defect

L.S. Kimpton, A. Schwab, F. Ehlicke, S.L. Waters, C.P. Please, J.P. Whiteley, H.M. Byrne

PII: S0025-5564(16)30251-6  
DOI: [10.1016/j.mbs.2017.07.008](https://doi.org/10.1016/j.mbs.2017.07.008)  
Reference: MBS 7959



To appear in: *Mathematical Biosciences*

Received date: 18 October 2016  
Revised date: 17 May 2017  
Accepted date: 18 July 2017

Please cite this article as: L.S. Kimpton, A. Schwab, F. Ehlicke, S.L. Waters, C.P. Please, J.P. Whiteley, H.M. Byrne, A mathematical model for cell infiltration and proliferation in a chondral defect, *Mathematical Biosciences* (2017), doi: [10.1016/j.mbs.2017.07.008](https://doi.org/10.1016/j.mbs.2017.07.008)

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**

- A mathematical model of cell a chondral defect filled with a hydrogel is developed.
- The mathematical model is applied to ex vivo osteochondral explants.
- Preliminary experimental data interpreted.
- Suitable chondrocyte seeding strategies for developing healthy tissue are predicted.

Download English Version:

<https://daneshyari.com/en/article/5760435>

Download Persian Version:

<https://daneshyari.com/article/5760435>

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