

Designing bone healing therapies that better mimic regeneration

February 15 2017



Credit: Mary Ann Liebert, Inc., publishers

The range of biomimetic approaches to promote bone growth that are at the core of current bone healing therapies need to more closely emulate natural regenerative mechanisms. A review of biomimetic strategies to help heal bone defects, with an emphasis on cell transplantation, is published in *BioResearch Open Access*.

In the article entitled "Biomimetics of Bone Implants: The Regenerative Road," Derrick Wan, MD and a team of researchers from Stanford University School of Medicine and Stanford University, California, examine the mechanical stability of [bone implants](#) and the effectiveness and challenges of grafts based on soluble [bone](#) minerals, structural proteins that comprise the extracellular matrix, or implants containing active cell populations.

"This article provides a comprehensive review of the literature and current implant products. The focus on biomimetics for regenerative strategies provides a new and exciting avenue for research," says BioResearch Open Access Editor Jane Taylor, PhD, Edinburgh Medical School: Biomedical Sciences, University of Edinburgh, Scotland.

More information: Elizabeth Brett et al, Biomimetics of Bone Implants: The Regenerative Road, *BioResearch Open Access* (2017).
[DOI: 10.1089/biores.2016.0044](https://doi.org/10.1089/biores.2016.0044)

Provided by Mary Ann Liebert, Inc

Citation: Designing bone healing therapies that better mimic regeneration (2017, February 15) retrieved 5 May 2024 from
<https://medicalxpress.com/news/2017-02-bone-therapies-mimic-regeneration.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private

study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.