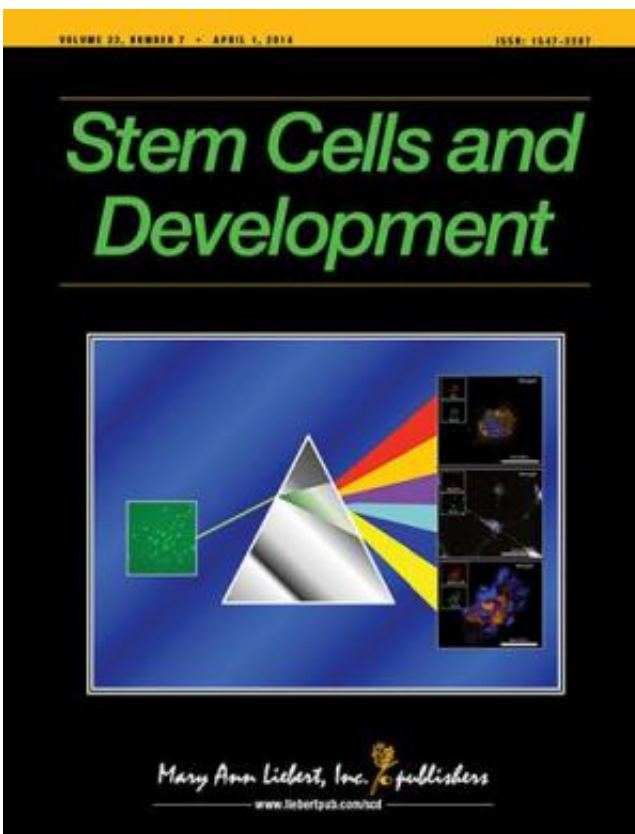


First evidence that very small embryonic-like stem cells from human adult tissues are multipotent

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Rare, very small embryonic-like stem cells (VSELs) isolated from human adult tissues could provide a new source for developing regenerative therapies to repair complex tissues damaged by disease or

trauma. The ability of these most-primitive, multipotent stem cells to differentiate into bone, neurons, connective tissue, and other cell types, and the proper criteria for identifying and isolating VSELs, are described in two articles in *Stem Cells and Development*.

Russ Taichman and coauthors, University of Michigan (Ann Arbor) and NeoStem (New York, NY), implanted human VSELs into the cavity created by a cranial wound and provided the first demonstration that they could generate tissue structures containing multiple [cell types](#). Their work is presented in "[Human and Murine Very Small Embryonic-Like \(VSEL\) Cells Represent Multipotent Tissue Progenitors, In Vitro and In Vivo.](#)"

Malwina Suszynska et al., University of Louisville, KY, and Pomeranian Medical University (Szczecin) and Jagiellonian University (Krakow), Poland, explore the challenges in isolating these rare [stem cells](#) and the importance of not confusing VSELs with other types of embryonic or reprogrammed adult [pluripotent stem cells](#), or with monopotent [adult stem cells](#). In the Issues in Development article "The Proper Criteria for Identification and Sorting of Very Small Embryonic-Like Stem Cells (VSELs), and Some Nomenclature Issues," the authors present the most current descriptions and terminology for characterizing [VSELs](#).

"I find the data presented by the Taichman group to be compelling and challenging. However, the current debate as to the significance of the body of publications concerning VSELs can only be resolved by a cooperative investigation across laboratories using identical methodologies and source materials," says Editor-in-Chief Graham C. Parker, PhD, The Carman and Ann Adams Department of Pediatrics, Wayne State University School of Medicine, Detroit, MI.

Provided by Mary Ann Liebert, Inc

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