



## Regenerative Medicine: Progressing Toward Cures

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What an exciting year in stem cell science and translational medicine! *STEM CELLS Translational Medicine (SCTM)* and its sister journal, *STEM CELLS* ([www.Stemcells.Com](http://www.Stemcells.Com), @StemCellsJournal), with its focus on a better understanding of stem cell function, continued to publish remarkable, groundbreaking findings that are moving the field forward. And, in the regulatory arena, the U.S. Food and Drug Administration began implementing the 21st Century Cures Act, designed to bring new treatments, including regenerative medicine, to patients more quickly and efficiently. Just in the past few months, the agency issued important guidance documents designed to provide a clear pathway to scientists who are developing therapies in the field.

The field is now at a tipping point. While the science is relatively new and numerous challenges remain, there has been enough progress to warrant a new focus on how to efficiently and cost-effectively bring new treatments to patients. Just as advanced manufacturing changed the face of the auto industry, so must regenerative medicine turn to the practical considerations of producing its products on a mass scale. To ensure that regenerative medicine therapies are one day commonplace, this focus on manufacturing must happen now, even as we grapple with the fields remaining scientific challenges.

We are pleased to report that *SCTM* is taking a leadership role in this arena in collaboration with the Regenerative Medicine Manufacturing Society and the addition of a new section dedicated to this area. Now, in addition to turning to this journal for the latest advances in clinical translational medicine, you also can expect to learn how scientists around the world are advancing regenerative medicine manufacturing. You will see reports of breakthroughs in areas such as:

- Manufacturing for Regenerative Medicine
- GMP aspects
- Cell-based processing/expansion
- Cell-based potency/storage
- Quality assurance/control
- Scale-up and production
- Cell-based therapies release criteria
- Regulations for manufacturing

With this new section, complementing the high-caliber research that *SCTM* has a reputation

for publishing, the journal is truly a leader in the field of regenerative medicine. As an example of the research published in *SCTM*, below we highlight the top five "most accessed" articles during 2017, viewed or downloaded a total of almost 30,000 times, as well as those with the highest Altmetric scores, with an average score of 462. Altmetric scores track where research is shared and discussed online. *SCTM* is proud to have published research from around the world pointing to potential new treatments for a wide range of diseases affecting the population, from Parkinson's disease and diabetes to cerebral palsy and autism.

### TOP ACCESSED ARTICLES

Autologous Cord Blood Infusions Are Safe and Feasible in Young Children with Autism Spectrum Disorder: Results of a Single-Center Phase I Open-Label Trial

Geraldine Dawson et al.

Mesenchymal Stem Cells: Time to Change the Name!

Arnold I. Caplan

Mesenchymal Stem Cell-Derived Extracellular Vesicles as Mediators of Anti-Inflammatory Effects: Endorsement of Macrophage Polarization

Claudia Lo Sicco et al.

Platelet-Derived Mitochondria Display Embryonic Stem Cell Markers and Improve Pancreatic Islet  $\beta$ -Cell Function in Humans

Yong Zhao et al.

Concise Review: Developing Best-Practice Models for the Therapeutic Use of Extracellular Vesicles

Agnes T. Reiner et al.

### ARTICLES WITH HIGHEST ALTMETRIC SCORES

Platelet-Derived Mitochondria Display Embryonic Stem Cell Markers and Improve Pancreatic Islet  $\beta$ -Cell Function in Humans

Yong Zhao et al.

Effect of Autologous Cord Blood Infusion on Motor Function and Brain Connectivity in Young

Children with Cerebral Palsy: A Randomized, Placebo-Controlled Trial

Jessica M. Sun et al.

Durable Control of Autoimmune Diabetes in Mice Achieved by Intraperitoneal Transplantation of “Neo-Islets,” Three-Dimensional Aggregates of Allogeneic Islet and “Mesenchymal Stem Cells”

Christof Westenfelder et al.

Acceleration of Fracture Healing by Overexpression of Basic Fibroblast Growth Factor in the Mesenchymal Stromal Cells

Hongliang Zhang et al.

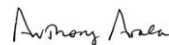
Immature Midbrain Dopaminergic Neurons Derived from Floor-Plate Method Improve Cell Transplantation Therapy Efficacy for Parkinsons Disease

Lifeng Qiu et al.

*SCTM*'s publisher, AlphaMed Press, and its leaders Ann and Martin Murphy, should be commended for their vision and for the work that their dedicated staff does daily to bring these high-

quality publications to our readers. A special thanks goes to our Senior Editors Paolo De Coppi, Geoffrey Gurtner, Douglas Losordo, Alan Trounson, and Rocky Tuan and our distinguished editorial board members who work hard to make sure the best papers can be accepted.

We are grateful to each and every one of you who has played a role in *SCTM* attaining a leadership role in the field. We are especially thankful to our contributors who are doing exceptional work. We look forward to reviewing your work in 2018 and especially to seeing advances made in the manufacturing arena. And to our readers, we thank you for continuing to come back to the journal for the latest advances in the field. All of us at *SCTM* are expecting another successful year in 2018 and we offer best wishes to each of you.



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