

Editorial





Usage of stem cell, regenerative medicine, nanotechnology and tissue engineering science education to improve stem cell and nano-science literacy

Editorial

I found this is a good chance to introduce my latest scientific achievements in relation to advances in regenerative medicine and tissue engineering, but I preferred to start with the justifications of my nomination by the Council of Menoufia University, Egypt to Award of Nano Science Research Excellence (NML Researcher Award for outstanding researcher in Nanotechnology) and then present synopsis about my scientific achievements in this field.

Summary of Prof. Laila Montaser justifications of its outstanding nature as follows:

- 1) For the advancement of Stem cell and Nano science in developing countries to introduce her outstanding contributions to the application of science and technology and scientific research achievements of outstanding significance for the development of scientific thought through her leadership of researches since more than 17 years in the field of stem cell biology, regenerative medicine, nanotechnology and tissue engineering.¹⁻⁷
- 2) For her contributions to understanding of stem cell biology, regenerative medicine, nanotechnology and tissue engineering based her in-depth experimental investigations and her contribution by series of oral presentations and lectures in the Faculty to Clinical Pathology students and staff and also in local and international conferences.^{8–13}
- 3) About the advances in tissue engineering and regenerative medicine, Prof. Montaser represented Egypt and Menoufia Universty and also presented Montaser et al prospective pilot researches in two successive SPIE Nano science + Engineering 2015 and 2016 Conferences at San Diego, California, USA under the titles "NANO scaffolds and stem cell therapy in liver tissue engineering" and "Articular cartilage tissue engineering with plasma-rich in growth factors and stem cells with Nano scaffolds" respectively. 14-19
- 4) According to her outstanding contribution to the application of science and technology and scientific research achievement of outstanding significance for the development of scientific thought through her leadership of researches in the field of stem cell biology, regenerative medicine, nanotechnology and tissue engineering in many Master Science and MD theses.^{20–22}
- 5) Prof. Laila Montaser organized a workshop on regenerative medicine, stem cell, nanotechnology and tissue engineering "SRNT" on 12-13 April 2016 at the Clinical pathology Department, Faculty of Medicine, Menoufia University, Egypt. The aim of the workshop was to promote the sharing of good practices and transnational cooperation in the field of the appli-

Volume 2 Issue 2 - 2017

Laila Mahmoud Montaser

Department of Clinical Pathology, Menoufia University, Egypt

Correspondence: Laila Mahmoud Montaser, Professor of Clinical Pathology, The Head Founder of Clinical Pathology Department, President, founder and CEO, Chief Scientist of Stem Cell, Regenerative Medicine, Nanotechnology and Tissue Engineering (SRNT) Group, Faculty of Medicine Menoufia University, Egypt, Email lailamontaser@gmail.com

Received: April 08, 2017 | Published: April 20, 2017

cation of Stem Cell, Regenerative Medicine, Nano Technology, Tissue Engineering and ICT in Science Education learning and training. In two days, approximately 100 as academic staff, Head of Departments of Clinical Pathology, students participated in the workshop.^{23–25}

On the two days of the workshop, the key note speakers gave speeches on stem cell, regenerative medicine, nanoscience, nanotechnology and tissue engineering. Prof. Laila Mahmoud Montaser highlighted the importance of nanoscience literacy with her presentation titled "An attempt to improve Nano science literacy and awareness: A Nano science workshop for students and teachers". Other key note speaker, Ass. Prof. Ming Ming Wen touched upon how to use Nano science in drug delivery application with her presentation "Nanotechnology in drug delivery application." Another presentation titled "Nanotechnology in engineering stem cells and liver tissues" made by Prof. Laila Montaser, also a presentation titled "Application of Nanotechnology in Biology" was made by Ass. Prof. Tahsin Shoala and a presentation titled "Stem cell secrets" was made by Prof. Mohamed Ibrahim Sayed Ahmed.

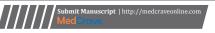
Even though the term and topics of Nanotechnology were very new and innovative for the students, they were open to learn and had positive attitudes since they can easily connect with the real life experiences.

Acknowledgements

None

Conflict of interest

The author declares no conflict of interest.





References

- Montaser LM, Fawzy SM. Stem cells in articular cartilage regeneration. 5th ICNBS Egypt 2017 international conference, Egypt: Springer; 2017.
- Montaser LM, Fawzy SM. Nanotechnology and tissue engineering. 5th ICNBS Egypt 2017 international conference, Egypt: Springer; 2017.
- Montaser LM, Fawzy SM. How plasma concentrate and stem cells for stem cell-based tissue engineering could contribute to articular cartilage tissue regeneration. 1st International Conference of Woman in Science (WISWB), Egypt: Springer; 2017.
- Montaser LM, Abbassy HA, Fawzy SM. Articular cartilage tissue engineering with plasma-rich in growth factors and stem cells with nano scaffolds. SPIE Nanoscience + Engineering conference, USA: Springer; 2016.
- Montaser LM. Regenerative medicine and tissue engineering-driven innovation of medical science and technology. Adv Tissue Eng Regen Med Open Access. 2016;1(1):00001.
- Montaser LM, El Azab DS, Tawfeek GA, et al. Liver regeneration in a carbon tetrachloride-induced acute liver failure model: do bone marrow-derived cells contribute? 12th Royan International Congress on Stem Cell Biology and Technology, Iran: Springer; 2016.
- Montaser LM, Fawzy SM. Nanotechnology to drive stem cell commitment in liver tissue engineering. 12th Royan International Congress on Stem Cell Biology and Technology, Iran: Springer; 2016.
- Montaser LM, Fawzy SM. Advances reshape stem cell research. ICNBS Egypt 2016 International conference, Egypt: Springer; 2016
- Montaser LM, Fawzy SM. Recent advances in tissue engineering using stem cell therapy and nano scaffolds. ICNBS Egypt 2016 International conference, Egypt: Springer; 2016
- Montaser LM, Eid TA, Helwa MA. Predictive value of transforming growth factor β-1 (TGFβ-1) and platelet count in preparation-rich in growth factors in improvement of Knee Osteoarthritis. International Conf. on research in engineering science and technology, UAE: Springer; 2016.
- Montaser LM, Fawzy SM. NANO scaffolds and stem cell therapy in liver tissue engineering. SPIE Nanoscience + Engineering conference, USA: Springer; 2015
- Montaser LM. Human stem cell research and regenerative medicine. 2nd International Conference, Egypt: Springer; 2015.

- Montaser LM, Fawzy SM. Advances reshape stem cell research. ICNBS Egypt 2015 International conference. Egypt: Springer; 2015.
- Montaser LM, Fawzy SM. Nanotechnology to drive stem cell commitment. ICNBS Egypt 2015 International conference. Egypt: Springer; 2015.
- 15. Montaser LM, Fawzy SM. Nanotechnology offers promising opportunities to improve stem cells predicted to open new routes in regenerative medicine: Egyptian experience. 2014 Technological capacity building Forum in the field of new techniques in Arab countries, Jordan: Springer; 2014
- Montaser LM, Fawzy SM. Nanotechnology offers new opportunities to enhance stem cell technology. 2014 International Conference on Nanomaterial's Synthesis, Fabrication and Applications, Egypt: Springer; 2014
- Montaser LM, Fawzy SM. Promising cell therapy achieves improvement outcomes. *J for hematology, stem cell biology and transplantation*. 2014;42(8):S53.
- Montaser LM, Fawzy SM. An Overview of Nanotechnology in Medicine. ICNBS Egypt 2013 International conference. Egypt: Springer;2013.
- Montaser LM, Fawzy SM. Clinical Trials for Stem Cell Therapies. IC-NBS Egypt 2013 International conference. Egypt: Springer. 2013
- Montaser LM. Use of E-Learning Technology in Medical Science Education. International Workshop "Science Education & Guidance in Schools, Italy: Springer; 2013.
- Montaser LM, Metwaly HG, Elbasuoni MA, et al. *In Vitro* differentiation of human adult stem cells into hepatic lineage cells. 9th Royan International Congress on Stem Cell Biology and Technology, Iran: Springer; 2013
- Montaser LM, Fawzy SM. Stem cell research technology. The International Workshop in Industrial Nanotechnology, Egypt: Springer; 2013.
- Montaser LM, Mortada MM, Fawzy SM. Impact of technology on the future of education. International Conference on education and New Learning Technologies, Spain: Springer; 2012.
- Montaser LM, Mortada MM, Fawzy SM. The role of education in development. International Conference on education and New Learning Technologies, Spain. Springer; 2012.
- Montaser LM, Fawzy SM. Role of biotechnology in stem cell trials. Of the International Conference in Nanotechnology, Biotechnology, Spectroscopy, Egypt: Springer; 2012.