

## Dr. Mazaher Gholipourmalekabadi Short CV, August 2020

Mazaher Gholipourmalekabadi, Assistant Professor and Director of Research of Medical Biotechnology and Regenerative Medicine Department at the Iran University of Medical Sciences. He published more than 70 peer-reviewed research papers. Dr. Gholipourmalekabadi's research focus is on naturally-occurring and synthetic biomaterials and their applications for wound healing, and regeneration of skin, cornea, bone, and cartilage. He also works on antibacterial scaffolds. He has special expertise in biomaterial engineering, functional tissue engineering and regenerative translational medicine with a focus on decellularization of organs and stem cells differentiation. Dr. Gholipourmalekabadi is mainly working on translational aspects of the biomaterials and explores novel methods for engineering of tissue substitutes. Some of his research outputs have been patented for commercial purposes. He is currently COB of Baztarmim Hezareh Ltd, working on the commercialisation of his research in the fields of tissue engineering and regenerative medicine.



**Education:** Dr. Gholipourmalekabadi has received his BSc degree in Medical Laboratory Sciences from Shahid Beheshti University of Medical Sciences, MSc degree in Medical Biotechnology from Tehran University of Medical Sciences, and PhD degree in Medical Biotechnology from Shahid Beheshti University of Medical Sciences.

**Publication:** 70 peer review publication.

**PhD supervisor:** He supervised and successfully completed 8 PhD.

**Commercialisation:** He has commercialised biological-based wound dressing, synthetic antibacterial wound dressing, and bone filler.

Website:

<https://term.iums.ac.ir/content/58289/Dr.-Mazaher-Gholipourmalekabadi,-PhD>

### ***Selected Research Papers***

Diba, M., Kharaziha, M., Fathi, M., **Gholipourmalekabadi, M.**, and Samadikuchaksaraei, A. (2012) Preparation and characterization of polycaprolactone/forsterite nanocomposite porous scaffolds designed for bone tissue regeneration. *Composites Science and Technology* 72(6), 716-723

Ghasemi Hamidabadi, H., Rezvani, Z., Nazm Bojnordi, M., Shirinzadeh, H., Seifalian, A.M., Joghataei, M.T., Razaghpour, M., Alibakhshi, A., Yazdanpanah, A., and Salimi, M. **Gholipourmalekabadi, M\*** (2017) Chitosan-intercalated montmorillonite/poly (vinyl alcohol) nanofibers as a platform to guide neuronlike differentiation of human dental pulp stem cells. *ACS applied materials & interfaces* 9(13), 11392-11404

Farhadihosseinabadi, B., Zarebkohan, A., Eftekhary, M., Heiat, M., Moghaddam, M.M., and **Gholipourmalekabadi, M\***. (2019) Crosstalk between chitosan and cell signaling pathways. *Cellular and Molecular Life Sciences*, 1-22

**Gholipourmalekabadi, M\***, Khosravimelal, S., Nokhbedehghan, Z., Sameni, M., Jajarmi, V., Urbanska, A.M., Mirzaei, H., Salimi, M., Chauhan, N.P.S., and Mobaraki, M. (2019b) Modulation of hypertrophic scar formation using amniotic membrane/electrospun silk fibroin bilayer membrane in a rabbit ear model. *ACS Biomaterials Science & Engineering* 5(3), 1487-1496

**Gholipourmalekabadi, M\***, Mozafari, M., Salehi, M., Seifalian, A., Bandehpour, M., Ghanbarian, H., Urbanska, A.M., Sameni, M., Samadikuchaksaraei, A., and Seifalian, A.M. (2015e) Development of a cost-effective and simple protocol for decellularization and preservation of human amniotic membrane as a soft tissue replacement and delivery system for bone marrow stromal cells. *Advanced healthcare materials* 4(6), 918-926

**Gholipourmalekabadi, M\***, Samadikuchaksaraei, A., Seifalian, A.M., Urbanska, A.M., Ghanbarian, H., Hardy, J.G., Omrani, M.D., Mozafari, M., Reis, R.L., and Kundu, S.C. (2018a) Silk fibroin/amniotic membrane 3D bilayered artificial skin. *Biomedical Materials* 13(3), 035003

**Gholipourmalekabadi, M\***, Sameni, M., Hashemi, A., Zamani, F., Rostami, A., and Mozafari, M. (2016a) Silver- and fluoride-containing mesoporous bioactive glasses versus commonly used antibiotics: Activity against multidrug-resistant bacterial strains isolated from patients with burns. *Burns* 42(1), 131-140

**Gholipourmalekabadi, M\***, Sameni, M., Radenkovic, D., Mozafari, M., Mossahebi-Mohammadi, M., and Seifalian, A. (2016b) Decellularized human amniotic membrane: how viable is it as a delivery system for human adipose tissue-derived stromal cells? *Cell proliferation* 49(1), 115-121

**Gholipourmalekabadi, M\***, Sapru, S., Samadikuchaksaraei, A., Reis, R.L., Kaplan, D.L., and Kundu, S.C. (2019c) Silk fibroin for skin injury repair: Where do things stand? *Advanced drug delivery reviews*, 2019

**Gholipourmalekabadi, M\***, Seifalian, A.M., Urbanska, A.M., Omrani, M.D., Hardy, J.G., Madjd, Z., Hashemi, S.M., Ghanbarian, H., Brouki Milan, P., and Mozafari, M. (2018b) 3D protein-based bilayer artificial skin for the guided scarless healing of third-degree burn wounds in vivo. *Biomacromolecules* 19(7), 2409-2422

**Gholipourmalekabadi, M.**, Zhao, S., Harrison, B.S., Mozafari, M., and Seifalian, A.M. (2016c) Oxygen-generating biomaterials: a new, viable paradigm for tissue engineering? *Trends in biotechnology* 34(12), 1010-1021

Moghaddam, M.M., Eftekhary, M., Erfanimanesh, S., Hashemi, A., Omrani, V.F., Farhadhosseinabadi, B., Lasjerdi, Z., Mossahebi-Mohammadi, M., Chauhan, N.P.S., and Seifalian, A.M., **Gholipourmalekabadi, M\*** (2018) Comparison of the antibacterial effects of a short cationic peptide and 1% silver bioactive glass against extensively drug-resistant bacteria, *Pseudomonas aeruginosa* and *Acinetobacter baumannii*, isolated from burn patients. *Amino acids* 50(11), 1617-1628

Rostami, A., Mozafari, M., **Gholipourmalekabadi, M\***, Caicedo, H.H., Lasjerdi, Z., Sameni, M., and Samadikuchaksaraei, A. (2015) Optimization of fluoride-containing bioactive glasses as a novel scolicidal agent adjunct to hydatid surgery. *Acta tropica* 148, 105-114

Samadikuchaksaraei, A., **Gholipourmalekabadi, M\***, Erfani Ezadyar, E., Azami, M., Mozafari, M., Johari, B., Kargozar, S., Jameie, S.B., Korourian, A., and Seifalian, A.M. (2016a) Fabrication and in vivo evaluation of an osteoblast-conditioned nano-hydroxyapatite/gelatin composite scaffold for bone tissue regeneration. *Journal of Biomedical Materials Research Part A* 104(8), 2001-2010

Eftekhari BS, Eskandari M, Janmey PA, Samadikuchaksaraei A, **Gholipourmalekabadi M\*** (2020). Surface Topography and Electrical Signaling: Single and Synergistic Effects on Neural Differentiation of Stem Cells. *Advanced Functional Materials*. 2020

Rezaei N, Hamidabadi HG, Khosravimelal S, Zahiri M, Ahovan ZA, Bojnordi MN, Eftekhari BS, Hashemi A, Ganji F, Darabi S, **Gholipourmalekabadi M\*** (2020). Antimicrobial peptides-loaded smart chitosan hydrogel: Release behavior and antibacterial potential against antibiotic resistant clinical isolates. *International Journal of Biological Macromolecules*. 2020