

Curriculum Vitae/ résumé



1. Personal Details:

- Full Name: **Ali Golchin**
- Address: Assistant Professor of Applied Cell Sciences,

Department of Clinical Biochemistry and Applied Cell Sciences, School of Medicine, Urmia University of Medical Sciences

- Date of birth: 28/July/1990
- Telephone number: +989145229562
- Email address: Agolchin.vet10@yahoo.com
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- Scientists and researchers networking page:



- ❖ **Brief CV:** I'm a professor and researcher who specializes in cell-based therapy and similar approaches. Mesenchymal stem cells (MSCs) and new cell/tissue-based therapies are my areas of expertise. I'm working with MSCs obtained from adipose tissue and other MSC sources. I also work in the fields of cell transport systems and tissue engineering (skin applications).

2. Education and Qualifications:

- **2016-2019: PhD, Applied Cell Sciences**, School of Advanced Technologies in Medicine, Shahid Beheshti Medical University, Tehran, Iran.
Thesis: Study of the potency of Human Buccal Fat Pad Derived-Mesenchymal Stem Cell and Curcumin on Nanofiber structure for Wound Healing (Supervisor: Dr. Abdolreza Ardeshirylajimi, Prof. Masoud Soleimani & Dr. Arash Khojasteh)
- **2009-2015: DVM (Doctor of Veterinary Medicine)**, Faculty of Veterinary Medicine, University of Tabriz, Tabriz, Iran.
Thesis: Evaluation of the Effect of Ammonium Chloride Concentrations in *In-Vitro* Fertilization of Ovine Oocytes and Expression of BCL2 Gene (Supervisor: Dr. Reza Asadpour, Prof Leila Roshangar)
- **2019: Master of Business Administration in Healthcare (Healthcare MBA)**, Academic Center for Education, Culture and Research, Shahid Beheshti Medical University, Tehran, Iran
- **2020-present: Master of Medical Education**, virtual School of Medical Education and Management, Shahid Beheshti Medical University, Tehran, Iran
- **2004-2008: High School Diploma**: Shot-Maku, West Azerbaijan, Iran.

3. Professional Memberships

- **Iranian Tissue Engineering and Regenerative Medicine Society**
- **Universal Scientific Education and Research Network**
- **Iranian Society of Embryology & Reproductive Biology**
- **Iranian Veterinary Medicine Council**
- **Iranian Association of Food Health**

4. Language

Azerbaijani (Native or bilingual proficiency), Persian (Native or bilingual proficiency), English

5. Academic Projects (Terminated & Ongoing):

- 1) **Study of the potency of Human Buccal Fat Pad Derived-Mesenchymal Stem Cell on Nanofiber Scaffold for Wound Healing** (Shahid Beheshti University of Medical Sciences, Grant No: 12561)
- 2) **Evaluation of dermal growth of keratinocytes derived from foreskin in co-culture condition with mesenchymal stem cells on polyurethane-amnion scaffold** (Shahid Beheshti University of Medical Sciences, Grant No: 14269).

- 3) **Study of TLR4 Antagonist to Discover Compounds for Inhibition of Neuropathy by Using Molecular Docking and Screening of FDA Approved Drugs** (Shahid Beheshti University of Medical Sciences, Grant No: 9237)
- 4) **Fabrication and characterization of electrospun nanofibrous scaffold from amnion-polyurethane-gelatin for growth and differentiation of keratinocytes as in vitro and in vivo** (Shahid Beheshti University of Medical Sciences, Grant No: 11960).
- 5) **Study of stem cell based therapy strategies of dermatological diseases in clinical trial studies** (Baqiyatallah University of Medical Sciences, Grant No: 91003136).
- 6) **Studying and introducing FDA Approved Biological (Cell-Gene) products** (Shahid Beheshti University of Medical Sciences, Grant No: 16078)
- 7) **Fabrication and characterization of multilayer electrospun nanofibrous patch contained epidermal growth factor (EGF) for the healing of full-thickness wounds** (Baqiyatallah University of Medical Sciences, Grant No: 97000637)
- 8) **Study of the gene expression levels for inflammatory and anti-inflammatory cytokines (IL10, IL-1 β , IL-6, IL-8, IL-17, MIF and CTLA4) in individuals with Covid-19 and its association with lung inflammation** (Urmia University of Medical Sciences, Grant No: 10285)
- 9) **Evaluation of the effect of mesenchymal stem cell therapy in COVID-19 patients a systematic review and meta-analysis** (Urmia University of Medical Sciences, Grant No: 10656)

6. Publications

❖ Authored Books and Chapters

- In vitro fertilization & Laboratory condition's: **Ilk Ay-Urmia** (Iran 2016). **Ali Golchin***, Saba Ahmadi (Book, Persian)
- Artificial Insemination in poultry: **Ilk Ay-Urmia** (Iran 2017). Peyman Danesh, Saba Ahmadi, **Ali Golchin**, Hamid Fatehi (Book, Persian)
- Promotion of Cell-Based Therapy: Special Focus on the Cooperation of Mesenchymal Stem Cell Therapy and Gene Therapy for Clinical Trial Studies. **Springer Nature**- United States (2018, 4: 103-118). **Ali Golchin***, Mahmoud Rekabgardan, Ramezan Ali Taheri, and Mohammad Reza Nourani. Adv Exp Med Biol – Cell Biology and Translational Medicine (Chapter)
- Nanotechnology in cell delivery systems: **Taylor & Francis**- United States (2019, 10 Volumes). **Ali Golchin***, Parisa Kangari, Sepideh Mousazadehe, Faeza Moradi, Simzar Hosseinzadeh. 21st Century Nanoscience-Handbook (Chapter)

- Regenerative Medicine: Injectable Cell-Based Therapeutics and Approved Products. **Springer Nature**- United States (2019). **Ali Golchin***, Forough Shams, Parisa Kangari, Arezoo Azari, Simzar Hosseinzadeh. Adv Exp Med Biol – Cell Biology and Translational Medicine (Chapter)
- Application of Stem Cell Encapsulated Hydrogel in Dentistry. **Springer Nature's e-book**- United States (2019) Abdolreza Ardeshirylajimi, **Ali Golchin**, Jessica Vargas, Lobat Tayebi* (Book title: Applications of Biomedical Engineering in Dentistry) ISBN:978-3-030-21582-8 (Chapter 13)
- Embryonic Stem Cells in Clinical Trials: Current Overview of Developments and Challenges. **Springer Nature**- United States (2020, 11: 19-37). **Ali Golchin** et al. Adv Exp Med Biol – Cell Biology and Translational Medicine (Chapter)
- Bilayer scaffolds for Interface tissue engineering and regenerative medicine: a systematic reviews. **Springer Nature**- United States (2021, 1-31). **Ali Golchin** et al. Adv Exp Med Biol – Cell Biology and Translational Medicine (Chapter)

❖ Full English Articles:

- 1) Stem Cell Therapy Potency in Personalizing Severe COVID-19 Treatment. Basiri, A., Mansouri, F., Azari, A., (...), Heidari, A., **Golchin, A***. *Stem cell reviews and reports, 2021; 17(1), pp. 193-213.*
- 2) Critical roles of TLRs on the polarization of mesenchymal stem cells for cell therapy of viral infections: a notice for COVID-19 treatment. Gholizadeh-Ghaleh Aziz, S., Alipour, S., Ranjbarvan, P., (...), Babaei, G., **Golchin, A***. *Comparative Clinical Pathology, 2021; 30(2), pp. 119-128*
- 3) Effects of in vitro low oxygen tension preconditioning of buccal fat pad stem cells on in Vivo articular cartilage tissue repair. Dehghani Nazhvani, F., Mohammadi Amirabad, L., Azari, A., (...), **Golchin, A***, Hashemi, S. *Life Sciences, 2021; 280,119728*
- 4) Surface modification of graphene and its derivatives for drug delivery systems. Jonoush, Z.A., Farahani, M., Bohlouli, M., **Golchin, A.**, (...), Omidi, M., Zali, H. *Mini-Reviews in Organic Chemistry, 2021; 18(1), pp. 78-92*
- 5) Novel hybrid scaffold for improving the wound repair process: evaluation of combined chitosan/eggshell/vitamin D scaffold for wound healing. Deilami, A., Niknam, Z., **Golchin, A.**, (...), Zali, H., Omidi, M. *Polymer Bulletin; 2021, Accepted.*
- 6) Importance of Chromosomal Studies in Cell Therapy and Its Applications. F Mansouri, **A Golchin**

Alborz University Medical Journal. 2021; 10 (4), 501-511

- 7) Electrospun polycaprolactone nanofibers: current research and applications in biomedical application. A Azari, **A Golchin***, MM Maymand, F Mansouri, A Ardeshirylajimi
Advanced Pharmaceutical Bulletin; 2021, Accepted.
- 8) Osteogenic Differentiation Potential of Adipose-Derived Mesenchymal Stem Cells Cultured on Magnesium Oxide/Polycaprolactone Nanofibrous Scaffolds for Improving Bone Tissue Reconstruction. Zahra Niknam, **Ali Golchin***, Parviz Ranjbarvan, Mostafa Rezaei –Tavirani, Hakimeh Zali, Vahid Mansouri
Advanced Pharmaceutical Bulletin, 2020: Accepted
- 9) Cell-Based Therapy for Severe COVID-19 Patients: Clinical Trials and Cost-Utility. **Ali Golchin**
Stem cell reviews and reports, 2020: Accepted
- 10) Mesenchymal stem cell therapy for COVID-19: present or future. **A Golchin**, E Seyedjafari, A Ardeshirylajimi
Stem cell reviews and reports, 2020: 1-7
- 11) Wound healing improvement by curcumin-loaded electrospun nanofibers and BFP-MSCs as a bioactive dressing. **A Golchin**, S Hosseinzadeh, A Jouybar, M Staji, M Soleimani,
Polymers for Advanced Technologies. <https://doi.org/10.1002/pat.4881>
- 12) Effects of bilayer nanofibrillar scaffolds containing epidermal growth factor on full-thickness wound healing. **Ali Golchin**, MR Nourani.
Polymers for Advanced Technologies (Accepted in 2019).
- 13) Surface Modification of Graphene and its Derivatives for Drug Delivery Systems. Zahra A. Jonoush, Masoumeh Farahani, Mahboubeh Bohlouli, Zahra Niknam, **Ali Golchin**, Shadie Hatamie⁶, Mostafa Rezaei-Tavirani², Meisam Omid⁷ and Hakimeh Zali.
Mini-Reviews in Organic Chemistry, 2020, 17, 1-15
- 14) Future regenerative medicine under control of 3D scaffolds. **Ali Golchin**, Sina Farzaneh, Bahareh Pourjabbara, Mohammad Kanafi Mahboba, Javad Ranjbaria, Simzar Hosseinzadeh, Nasim Salehi-Nik.
Current stem cell research & therapy. (Accepted in 2019).
- 15) Biological behavior study of the electrospun Curcumin incorporated Chitosan/PVA nanofibers for biomedical applications. **Ali Golchin**, Simzar Hosseinzadeh, Masoumeh Staji, Masoud Soleimani, Abdolreza Ardeshirylajimi, Arash Khojasteh.
Journal of Cellular Biochemistry. (<https://doi.org/10.1002/jcb.28808> ,2019).
- 16) Biological products: Cellular Therapy and FDA Approved Products. **Ali Golchin***, Tahereh Zarnoosheh Farahany.
Stem Cell Reviews and Reports, 2019. 15(2), pp. 166-175

- 17) Increased osteogenic differentiation potential of MSCs cultured on nanofibrous structure through activation of Wnt/ β -catenin signaling by inorganic polyphosphate. Abdolreza Ardeshirylajimi, **Ali Golchin**, Arash Khojasteh, Mojgan Bandehpour.
Artificial Cells, Nanomedicine, and Biotechnology, 2018. 46(sup3), pp. S943-S949
- 18) Cell-surface interaction and biological behavior of cells: an overview. **A Golchin**, P Ranjbarvan, A Marzban
Regeneration, Reconstruction & Restoration, 2019, 4 (4)
- 19) The clinical trials of mesenchymal stem cell therapy in skin diseases: an update and concise review. **A Golchin**, TZ Farahany, A Khojasteh, A Ardeshirylajimi.
Current stem cell research & therapy, 2019. 14(1):22-33
- 20) FDA approved drugs repurposing of Toll-like receptor4 candidate for neuropathy. Hakimeh Zali, **Ali Golchin**, Masoumeh Farahani, Mohsen Yazdani, Mohammad Mehdi Ranjbar, Ali Dabbagh.
Iranian Journal of Pharmaceutical Research, 2018. DOI:10.22037/ijpr.2019.2394
- 21) Enzymatic antioxidant and lipid peroxidation evaluation in the newly diagnosed breast cancer patients in Iran. Parisa Kangari, Tahereh Zarnoosheh Farahany, **Ali Golchin***, Somayeh Ebadollahzadeh, Arash Salmaninejad, Soltan Ali Mahboob, Alireza Nourazarian.
Asian Pacific Journal of Cancer Prevention (APJCP), 2018. 19(12):3511-3515
- 22) Bone tissue engineering: Adult stem cells in combination with electrospun nanofibrous scaffolds; Moradi SL, **Golchin A**, Hajishafieeha Z, Khani MM, Ardeshirylajimi A.
Journal of Cellular Physiology, 2018. 233(10): 5609-6522
- 23) The Exosomes Released from Different Cell types and Their Effects in Wound Healing; **A Golchin**, S Hosseinzadeh, A Ardeshirylajimi.
Journal of Cellular Biochemistry, 2018. 119(7): 5043-5052
- 24) The role of nanomaterials in cell delivery systems; **Ali Golchin***, S Hosseinzadeh, L Roshangar.
Medical molecular morphology, 2018. 51(1):1-12
- 25) Curcumin as New Phytochemical for Skin Cancer Treatment; **Ali Golchin**, Abdolreza Ardeshirylajimi;
Clinics in Oncology, 2018. 3: 1453
- 26) The Effect of Ammonium Chloride Concentration in *In-Vitro* Maturation Culture on Ovine Embryo Development; **Ali Golchin**, Reza Asadpour, Leila Roshangar, Raziallah Jafari-Jozani
J Reprod & Infertil, 2016. 17(3).
- 27) Raw cow milk quality: Relationship between antibiotic residue and somatic cell count; Mahmoudi, R., Asadpour, R., Pajohi Alamoti, M. R., **Golchin, A.**, Kiyani, R., Mohammad Pour, R. and Altafy, K.

International Food Research Journal, 2013. 20(6): 3347-3350.

❖ **Full Persian Articles:**

- 1) Overview of biologic products with marketing authorization approval for clinical application; **A Golchin**, S Mohammadpour, P Kangari, L Roshangar, J Ai
Studies in Medical Sciences 31 (11), 847-862
- 2) Cell therapy whit using embryonic stem cell source in clinical trial studies: Advantages and Limitations; **Ali Golchin***, Hassan Niknejad.
J Mazandaran Univ Med. 2017, 27(148): 161-175
- 3) The Evaluation of in vitro fertilization and early embryonic development in ghezel sheep; **Ali Golchin***, Reza Asadpour, Leila Roshangar, Parisa Kangari,
Zanko Journal of Medical Sciences, 2015. 16(48).
- 4) A Review on Antibiotic Residues in Animal-derived Foods in Iran over the Last Thirty Years; Razzagh Mahmoudi, **Ali Golchin***, Aida Farhoodi.
J Mazandaran Univ Med, 2014. 24(119): 204-213 (Persian).
- 5) Aflatoxin M1 and B1 contaminations in products of animal origin in Iran; R. Mahmoudi, **A Golchin***, N. Hosseinzadeh, P. Ghajarbeygi,
JOURNAL OF QAZVIN UNIVERSITY OF MEDICAL SCIENCES, 2014. 18(4): 49- 59.

❖ **Abstracts & Orals:**

- 1) **Golchin Ali***, **Ahmadi Sepideh**: using of embryonic stem cell source in clinical trial studies of eye diseases "Stem Cells and Regenerative Medicine in Ophthalmology" 2017 (**Oral**)
- 2) **Ali Golchin***, Simzar Hosseinzadeh, Sepideh Ahmadi: Stem Cell Therapy for Cardiovascular Diseases and Nanotechnology "2nd International Congress on Science and Technologies of Stem Cells and Regenerative Medicine" 2017. 153 of 308.
- 3) **Golchin Ali***, Asadpour Reza, Roshanger Leila ,Jafari-jozani Raziallah ,Javanshir Rezaei, Naghme, ,Esmailkhani Aylin, Dehghani Leila: The Effect of Ammonium Chloride Concentration on Expression of Bcl-2 Gene in Totipotent Embryonic Stem Cells of Early Ovine Embryonic Development. "The First National Festival & International Congress on Stem Cell and Regenerative Medicine" 2016. Tehran-Iran: Poster ID: 133
- 4) **Golchin Ali***, Dehghani Leila, Javanshir Rezaei Naghme, Esmailkhani Aylin: A Systematic Review on Apoptotic Activities of Genes Responsible in Embryonic Stem Cell "The First National Festival & International Congress on Stem Cell and Regenerative Medicine" 2016. Tehran-Iran: Poster ID: 143
- 5) Dehghani Leila ,**Golchin Ali** ,Etemadifar Masoud, Dehghani Sheshde Zahra: Vitamin D Effect on Endothelial Cell Treated by Sera of Multiple Sclerosis Patients, "The First National Festival & International Congress on Stem Cell and Regenerative Medicine" 2016. Tehran-Iran: Poster ID:119

- 6) Javad Ashrafi Helan, Ahmad Nematollahi, Mehdi Houshmand Zad1, Hossein Bagerniaee, **Ali Golchin**, Rashid Purmehdi Chelickdani, Amir Hossein Aslenajjar Shahbazi: Severe Cnemidocoptes pilae Infection and Its Pathological Lesions Responsible for The Death of 4 Budgerigars (Melopsittacus undulatus) in Iran -The 10th Asian Poultry Health-South Korea-Seoul: APPC 2014
- 7) Hossein Taefi Nasrabadi, **Ali Golchin***, Hossein Bagerniaee, The effect of the hydro alcohol extract of Rosa canina on rat intestinal glycosidase activity, "Laboratory & Diagnosis" 2014. Vol. 5, No 22, Supplement Issue: P:122
- 8) **Ali Golchin***, Parisa Kangari, A Systematic Review on the Biochemical and Therapeutic Effects of Rose canina, "Laboratory & Diagnosis" 2014. Vol. 5, No 22, Supplement Issue: P:120

9) به هنگام سازی استافیلوکوکوس اورئوس و استرپتوکوک آگالاکتیه برای مدیریت ورم پستان: **علی گلچین***، رضا اسدپور: همایش یک روزه کنترل ورم پستان در گاو شیری/ دانشگاه تبریز-۱۳۹۲ (Oral)

10) ضرورت تبیین استانداردها و راهکارهای کنترل آفلاتوکسین M1 و B1 در شیر و فراورده های لبنی در ایران- رزاق محمودی، **علی گلچین***، حسین باقرنیاپی: هشتمین کنگره دانشجویان دامپزشکی تبریز/ دانشگاه تبریز-۱۳۹۱ (Oral)

11) خواص بیولوژیکی پروتئین آلفالاکتوآلبومین- هفتمین کنگره دانشجویان دامپزشکی ایران- **علی گلچین***، حسین باقرنیاپی، حسین طائفی نصرآبادی- شیراز، ایران- ۱۳۸۹

7. Editor/Reviewer

- **Editorial Board:**
- Stem cell reviews and reports
- **Reviewer:**
- STEM CELLS Translational Medicine
- Stem cell research and therapy
- Stem cell reviews and reports
- Journal of Complementary Medicine Research
- Abstracts of "The First International Iranian Tissue Engineering and Regenerative Medicine Congress(iTERM)": Skin-cell therapy

8. Leadership and/or management roles

The First International Iranian Tissue Engineering and Regenerative Medicine Congress(iTERM), Tehran, Iran (2018)

The Second Summer School of Stem Cells and Regenerative Medicine. Shahid Beheshti University of medical science, Tehran, Iran (2017)

Chief Editor: Omid-e Daneshjoo publication- Faculty of Veterinary Medicine, University of Tabriz, Tabriz, Iran (2014)

Iranian Congress of Mastitis Control in Dairy Cattle- Faculty of Veterinary Medicine, University of Tabriz, Tabriz, Iran (2013)

Symposium of Diseases and Reproduction Management in Dairy Cattle- Faculty of Veterinary Medicine, University of Tabriz, Tabriz, Iran (2013)

9. Skills and Expertise

Principles of cell culture

Electrospinning technique

Working with animal models

Biocompatibility assays by MTT

Extraction of RNA and cDNA synthesis

Assessment of gene expression by PCR and Real-Time PCR

Cell differentiation staining

Isolation of stem cells

In vitro fertilization (IVF)

10. Workshops:

Series of workshops of Cellular therapy in Skin diseases

Meta-analysis and Stata

Preclinical imaging for cell therapy

Regenerative Medicine & Stem cell (Training Course)

Immuno-Cell therapy

Mesenchymal Stem Cell Culture

ARMS PCR

Research Methods and Article Writing

Electrolyte therapy in animal

Entrepreneurship

11. IT qualifications

Office, Mendeley, Inkscape, Endnote, iSpring, Research

12. Interests

Cell therapy and tissue engineering for skin reconstruction

Training of stem cell and cell-based therapeutic product

Cell delivery systems and cell trafficking in body

Extracellular vesicles application in regenerative medicine

Embryonic Stem Cell (Differentiation - Direction- Regenerative medicine applications)