

CV

Name: Faezeh

Sure Name: Shekari

Department: Stem cell

Research Group/Core Facility: Molecular systems biology



1: Personal Information

Birth date 24 June 1982

Nationality: Iranian

Place of Birth: Tehran

Marital Status: Married

2: Educational Background

PhD: September 2009- September 2015

Developmental biology, University College of Sciences, University of Science and Culture and Royan institute, Tehran, Iran

Total Average of Examination Marks: 18.87 (out of 20)

Title of thesis: Organellar proteomics of human embryonic stem cells

Thesis score: 19.15 (out of 20)

MSc: September 2004- March 2007

Cellular and Molecular Biology, School of Biology, University College of Sciences, University of Tehran, Tehran, Iran

Total Average of Examination Marks: 18.12 (out of 20)

Title of thesis: Proteomic analysis of induced glial cells from CNS

Thesis score: 19.95 (out of 20)

B.Sc.: September 2000- July 2004

Cellular and Molecular Biology, School of Biology, University College of Sciences, University of Tehran, Tehran, Iran

Total Average: 17.85 (out of 20)

I have been graduated as **TOP student** among more than 100 Biology students from different fields (Cellular and Molecular, Microbiology, Zoology and Botany)

3: membership of Society

2017-Now: ISEV member

2015- Now: **vice chairman** of Iranian proteomics society

2007 - Now: Iranian proteomics society

2009-2010: ISSCR

4: International projects

- Characterization of the Asia Oceania Human Proteome Organisation Membrane Proteomics Initiative Standard using Blue Native PAGE , 2010
- Sample preparation for the Asia Oceania Human Proteome Organisation Membrane Proteomics of hESCs Initiative Standard, 2011-2012
- Chair of ISEV Rigor & Standardization task force: <https://www.isev.org/page/conditionedmedium>

5.1: Recent invited speaker in international congress

- ISEV Infectious disease 2020: EVs subpopulation and COVID-19
- ISEV education day 2021: Conditioned medium derived EVs
- American Society for Biochemistry and Molecular Biology symposium 2021: considerations of the culture medium task force
- Royan international congress 2020: EVs subpopulation characterization and therapeutics

5.2: Oral presentation (selection)

1. Faezeh Shekari, Bill Jordan, Adeleh Taei, Hossein Baharvand, Ghasem Hosseini Salekdeh. BN PAGE analysis of MPI, 1st Clinical Proteomics Congress of Iran , 19 Feb 2008 (Oral presentation)
 2. Faezeh Shekari, Adele Taei, Pei-Wen Wang, Tai-Long Pan, Hossein Baharvand, Ghasem Hosseini Salekdeh. A complexomic study of human embryonic stem cell, The 2nd Iranian Proteomics Society Congress, oral presentation
 3. Faezeh Shekari, Adele Taei, Hossein Baharvand, Ghasem Hosseini Salekdeh. A COMPLEXOMIC STUDY OF HUMAN EMBRYONIC STEM CELL: BLUE NATIVE PAGE APPROACH, 7th ISSCR Annual Meeting, Barcelona July 8-11, 2009
 4. Faezeh Shekari, Adele Taei, Hossein Baharvand, Ghasem Hosseini Salekdeh. A complexomic study of human embryonic stem cell and human carcinoma stem cell, Royan international twin congress, 5th congress on stem cell biology and technology, Tehran, 23-25 September 2009, invited speaker
 5. Faezeh Shekari, Membrane proteomics of human embryonic stem cells , Proteomics symposium: current status and future prospect, IBB, Tehran university, 6 March 2013, invited speaker
 6. Faezeh Shekari, Proteomics of human embryonic stem cells, Proteomics educational symposium: proteomics in medical sciences, Alborz university, 28 October 2013, invited speaker
 7. Faezeh Shekari, Proteomics of human embryonic stem cells, Proteomics educational symposium: proteomics in medical sciences, School of Public health, Tehran university of Medical Sciences, 3 February 2014, invited speaker
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8. Faezeh Shekari, Bioinformtics in Proteomics, Proteomics educational symposium: proteomics in medical sciences, School of Public health, Tehran university of Medical Sciences, 3 February 2014, invited speaker
9. Faezeh Shekari, Human Membrane proteomics: searching for missing proteins, International HPP symposium, Royan institute, 2017, invited speaker
10. Faezeh Shekari, Extracellular vesicles: therapeutics and biomarker discovery, 2nd Bushehr Winter school 2018, invited speaker
11. Faezeh Shekari, Extracellular vesicles: therapeutics and biomarker discovery, 2nd Fasa Summer school 2018, invited speaker

6: Publications

6.1 Journal publications

1. Shekari F, Taei A, Pan TL, Wang PW, Baharvand H, Salekdeh GH. "Identification of cytoplasmic and membrane-associated complexes in human embryonic stem cells using blue native PAGE." *Molecular bioSystems*. 2011;7(9):2688-701.
 2. Shekari F, Baharvand H, Salekdeh GH. "Organellar proteomics of embryonic stem cells." *Advances in protein chemistry and structural biology*. 2014;95:215-30
 3. Hashemi A, Gharechahi J, Nematzadeh G, Shekari F, Hosseini SA, Salekdeh GH. "Two-dimensional blue native/SDS-PAGE analysis of whole cell lysate protein complexes of rice in response to salt stress." *Journal of plant physiology*. 2016;200:90-101.
 4. Shekari F, Nezari H, Larijani MR, Han CL, Baharvand H, Chen YJ, Salekdeh GH. "Proteome analysis of human embryonic stem cells organelles." *Journal of proteomics*. 2017;162:108-18.
 5. Shekari F, Nezari H, Chen YJ, Baharvand H, Hosseini Salekdeh G. "Data for whole and mitochondrial proteome of human embryonic stem cells." *Data Brief*. 2017;13:371-6.
 6. Weldemariam MM, Han CL, Shekari F, Kitata RB, Chuang CY, Hsu WT, Kuo HC, Choong WK, Sung TY, He FC, Chung MCM, Salekdeh GH, Chen YJ. Subcellular Proteome Landscape of Human Embryonic Stem Cells Revealed Missing Membrane Proteins. *Journal of proteome research*. 2018;17(12):4138-51.
 7. M Soleymani-Goloujeh, M; Saberi, S and Shekari, F*. "Extracellular Vesicles in Regenerative Medicine, a Brief Review." *Modern Medical Laboratory Journal*, 2018
 8. Shekari F, Han CL, Lee J, Mirzaei M, Gupta V, Haynes PA, lee BH, Baharvand H, Chen YJ, Hosseini Salekdeh G. "Surface markers of Human Embryonic Stem Cells: a meta-analysis of membrane proteomics reports" *Expert Rev Proteomics*. 2018;15(11):911-22.
 9. Therry C, Witwer K,... Shekari F, et al. "Minimal Information for Studies of Extracellular Vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines. *Journal of extracellular vesicles*. 2018;7(1):1535750.
 10. Tasbihi M, Shekari F*, Hajjaran H, Masoori L, Hadighi R. Mitochondrial proteome profiling of *Leishmania tropica*. *Microb Pathog*. 2019;133:103542.
 11. Mardpour S, Ghanian MH, Sadeghi-Abandansari H, Mardpour S, Nazari A, Shekari F, and Baharvand H. "Hydrogel-Mediated Sustained Systemic Delivery of Mesenchymal Stem Cell-
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Derived Extracellular Vesicles Improves Hepatic Regeneration in Chronic Liver Failure." *ACS applied materials & interfaces*. 2019; 2019 Oct 16;11(41):37421-37433.

12. Mahdavi pour, M., Hassanzadeh, G., Seifali, E., Mortezaee, K., Aligholi, H., Shekari, F., ... & Akbari, M. (2020). Effects of neural stem cell-derived extracellular vesicles on neuronal protection and functional recovery in the rat model of middle cerebral artery occlusion. *Cell biochemistry and function*, 38(4), 373-383.
 13. Firoozi, S; Pahlavan, S; Ghanian, MH; Rabbani, S; Barekat, M; Nazari, AR; Pakzad, M; Shekari, F; Hassani, SN; Moslem, F; Lahrood, F; Soleymani, M; Baharvand, H; "Mesenchymal stem cell-derived extracellular vesicles alone or in conjunction with a SDKP- conjugated self-assembling peptide improve a rat model of myocardial infarction" BBRC, 2020
 14. Karimi, P; Gheisari, A; Gasparini, S; Baharvand, H; Shekari, F; Satarian, L and Ader, M; "Crocetin Prevents RPE Cells from Oxidative Stress through Protection of Cellular Metabolic Function and Activation of ERK1/2" International Journal of Molecular Science, 2020
 15. Moradi, S; Torabi, P; Mohebbi, S; Amjadian, S; Bosma, P; Faridbod, F; Khoddami, V; Hosseini, M; Babashah, S; Ghotbaddini, M; Rasti, A; Shekari, F; Sadeghi-Abandansari, H; Kiani, J; Shamsara, M; Kazemi-Ashtiani, M; and Gholami, S; "10th Royan Institute's International Summer School on Molecular Biomedicine: From Diagnostics to Therapeutics", BioEssays 2020
 16. Seifali, Elham, Gholamreza Hassanzadeh, Marzieh Mahdavi pour, Keywan Mortezaee, Ashraf Moini, Leila Satarian, Faezeh Shekari, Abdoreza Nazari, Shabnam Movassaghi, and Mohammad Akbari. "Extracellular Vesicles Derived from Human Umbilical Cord Perivascular Cells Improve Functional Recovery in Brain Ischemic Rat via the Inhibition of Apoptosis." Iranian Biomedical Journal 24, no. 6 (2020): 347.
 17. Seyedrazizadeh, S. Z., Poosti, S., Nazari, A., Alikhani, M., Shekari, F., Pakdel, F., ... & Baharvand, H. (2020). Extracellular vesicles derived from human ES-MSCs protect retinal ganglion cells and preserve retinal function in a rodent model of optic nerve injury. *Stem cell research & therapy*, 11, 1-13.
 18. Tasbihi, M., Shekari, F.*, Hajjarian, H., Khanmohammadi, M., & Hadighi, R. (2020). Comparative mitochondrial proteomics of Leishmania tropica clinical isolates resistant and sensitive to meglumine antimoniate. *Parasitology research*, 119(6), 1857-1871.
 19. Mehryab, F., Rabbani, S., Shahhosseini, S., Shekari, F., Fatahi, Y., Baharvand, H., & Haeri, A. (2020). Exosomes as a next-generation drug delivery system: an update on drug loading approaches, characterization, and clinical application challenges. *Acta biomaterialia*.
 20. Carolina Soekmadji, ... Faezeh Shekari, ... Qian Wang & Lei Zheng (2020) The future of Extracellular Vesicles as Theranostics – an ISEV meeting report, *Journal of Extracellular Vesicles*, 9:1
 21. Alikhani, M., Amjadi, F., Mirzaei, M., Wu, Y., Shekari, F., Ashrafi, M., ... & Salekdeh, G. H. (2020). Proteome analysis of endometrial tissue from patients with PCOS reveals proteins predicted to impact the disease. *Molecular Biology Reports*, 47(11), 8763-8774.
 22. Shekari, F.*, Nazari, A., Kashani, S. A., Hajizadeh-Saffar, E., Lim, R., & Baharvand, H. (2021). Pre-clinical investigation of mesenchymal stromal cell-derived extracellular vesicles: a systematic review. *Cytotherapy*.
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23. Heydari, R., Abdollahpour - Alitappeh, M., Shekari, F., & Meyfour, A. (2021). Emerging Role of Extracellular Vesicles in Biomarking the Gastrointestinal Diseases. Expert review of molecular diagnostics, 21(9), 939-962.
24. Shekari, F., Jalili, S., & Rahmati, F. (2021). Isolation and Characterization of Human Blood Extracellular Vesicles: a Promising Method of Fluid Biopsy. Journal of Police Medicine, 10(2), 99-106.

* as corresponding author

6.2 Chapter books

1. F. Shekari, H. Baharvand, Chapter 7: **The mechanisms of self-renewal in human embryonic stem cells**, **Stem Cells: Embryonic Stem Cells**. Hossein Baharvand., Publisher: House of Biology press, 2007
2. H. Saledekh , A. Fathi, F. Shekari, H. Baharvand, Chapter 9: **Proteomics of Stem cells**, Stem Cells: Adult Stem Cells. Hossein Baharvand. Publisher: House of Biology press, 2007
3. F. Shekari, H. Baharvand, Chapter 10: **Utilizing biosystems in toxicology and pharmacology**: Stem Cells: Differentiation and Applications of Stem Cells, Hossein Baharvand. Publisher: House of Biology press, 2007
4. F. Shekari, Chapter 6: **Two dimensional Gel electrophoresis**, Stem Cells: Tissue engineering and laboratory methods. Hossein Baharvand. Publisher: House of Biology press, 2007
5. F. Shekari, Advanced search in PubMed, **How to write a scientific paper**, Under supervision of Dr. Hossein Baharvand, Publisher: House of Biology press, 2013
6. F. Shekari, EndNote, **How to write a scientific paper**, Under supervision of Dr. Hossein Baharvand, Publisher: House of Biology press, 2013

7. Teaching

Bioinformatics for biology students

- (MSc course): 2007- now

Advanced cell biology (From subcellular fractionation to systems biology)

- (PhD course): 2013-now
- (MSc course): 2017

Molecular assessments of the Cell

- (PhD course): 2018-now

Bio-ethics

- (BSc course): 2019

Proteomics

- PhD course: 2020-now

