

CV

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Address: Stem Cell and Developmental Biology Department, Royan Institute for Stem Cell Biology and Technology, Hafez Alley Nr.2 , Banihashem, Resalat, Tehran 16635-148, Iran

Research Group/Core Facility: Royan Advanced Therapy Medicinal Product Technology Development Center (Royan ATMP-TDC)

Employment: Associate Professor of Stem Cell and Developmental Biology

1: Personal Information

Name: Seyedeh Nafiseh Hassani

Gender: Female

Marital Status: Married

Nationality: Iranian

Date of birth: year: 1981 month: 3 day: 21

Place of Birth: Tehran

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2: Educational Background

Degree	Major	University	Date
B.Sc	Cellular and Molecular Biology	Tehran Uni. (Tehran, Iran)	1998-2002
M.Sc	Cellular and Molecular Biology	Khatam Uni. (Tehran, Iran)	2003-2006
Ph.D	Developmental Biology	Science and Culture Uni./Royan Institute (Tehran, Iran)	2008-2013

3: Teaching Experiences

Course	Location (University)	Level	Date
Developmental biology	University of Science & Culture	Ph.D M.Sc	2010-now
Stem cells	University of Science & Culture	M.Sc	2013-now
Cellular signal transduction	University of Science & Culture	Ph.D M.Sc	2013-2020
Cell biology	University of Science & Culture	M.Sc	2011-2016
Animal cell culture	University of Science & Culture	M.Sc	2010-2013

4: Employment

- Associate Professor of Stem Cell and Developmental Biology (April 2023-now)
- Head of Stem Cell and Developmental Biology Department at Royan Institute (2021-now)
- Production Manager at Advanced Therapy Medicinal Product (ATMP) center of Royan Institute (2017-now)
- Assistance Professor of Stem Cell and Developmental Biology (2015-2023)
- Lab. Manager and Research assistant at Royan Institute (www.royaninstitute.org, 2007-2015).

5: Interests

- Advanced Therapy Medicinal Products (ATMPs)
- CAR T-cell therapy
- Scale-up manufacturing of mesenchymal stromal cells in fully automated bioreactors
- Large-scale production and characterization of MSC-derived extracellular vesicles
- Investigation of cellular and molecular mechanisms underlying pluripotency

6: Research Experiences

- Good Manufacturing Practice (GMP)
- Industrial-scale cell therapy manufacturing
- Derivation of mouse and human pluripotent stem cells from blastocysts
- Hematopoietic stem cell differentiation from human pluripotent stem cells
- Cellular signal transduction pathways

7: Honors

- Referee of Royan International Twin Congress, 2016-now.
- Invited speaker in 2nd IRAQI CANCER BOARD CONFERENCE. *Current challenges and innovations of CAR T cell manufacturing*. 31st Oct-1st Nov 2024. Baghdad, Iraq.
- Invited speaker in 25th Royan International Twin Congress. *How to overcome the regulatory challenges of CAR T cell therapy?* 28-30 Aug 2024. Tehran, Iran
- Invited speaker in 3rd International Private Hospitals Congress & Exhibition (IPH). *The Developing Landscape of Tissue, Cell and Gene Therapy: Where Do We Stand?* 7-9 Aug 2024. Tehran, Iran.
- Invited speaker in 14th Royan International School. *Advanced Therapy Medicinal Products*. 14-16 Aug 2023. Tehran, Iran.
- Invited speaker in PCMD-Royan Institute Webinar Series. *Characterization of Advanced therapy Medicinal Products: Manufacturing of Mesenchymal Stromal Cell for Therapy as a Successful Model*. 20 Sep 2022. Tehran, Iran.
- Invited speaker in 12th Royan International E-Summer School. *Advanced Therapy Medicinal Products: Application of Biological Science*. 24-27 Jul 2021. Tehran, Iran.
- Invited speaker in the Royan-TESMA International Joint Webinar on Tissue Engineering & Regenerative Medicine. 26 Apr. 2021. Tehran, Iran.
- Invited speaker in the First International Iranian Tissue Engineering and Regenerative Medicine Congress (1th ITERM). 18-20 Jul. 2018. Tehran, Iran.
- Scientific chairperson of 8th Royan International Summer School on Immuno-Oncology and Translational Cancer Research. 22-27 Jul. 2017
- Invited speaker in Second International Stem Cells and Regenerative Medicine Congress. April 2017
- Invited speaker in Second International & Fourteenth Iranian Genetics Congress May 2016
- Invited speaker in Pre-congress of 12th Royan International Twin Congress, September 6, 2011. Title: Pluripotent Stem Cells: Identity, Origin and Challengeable issues.
- Invited speaker in second Royan International Summer School on Stem Cells and Developmental Biology. July 17-22, 2011. Title: Pluripotent Stem Cells
- Invited speaker in Embryology Symposium. February 23-24, 2011. Title: The application of stem cells in embryology.
- Invited speaker in Pre-congress of 11th Royan International Twin Congress, September 14, 2010. Title: Embryonic Pluripotent Stem Cell Lines and the Importance of Extrinsic Regulation.

- Invited speaker in first Royan International Summer School on Stem Cells and Developmental Biology. July 12-15, 2010. Title: From Stem Cells to Germ Cells.
- Invited speaker in 10th Royan International Twin Congress, September 23-25, 2009. Tehran, Iran. Title: Rock Inhibitor Supports Efficient Cryopreservation and Enhances Cloning Efficiency of Feeder-Free Human Pluripotent Stem Cells

8: Awards

- The best selected articles in the first Iranian Council for Stem Cell Sciences and Technologies 2015 festival. Honor of 8000\$ scientific grant.
- The best oral presentation in Iranian Society of Embryology and Reproductive Biology (ISERB) 2015 Congress. Title: Suppression of Transforming Growth Factor β Signaling Promotes Ground State Pluripotency from Single Blastomeres.
- National winner of 15th Royan International Research Award, September 2014. Title: The Augmented BMP Pluripotency Pathway via TGF- β Suppression Maintains the Ground State of Embryonic Stem Cells self-renewal.
- The best oral presentation in second Royan International Summer School on Stem Cells and Developmental Biology. July 17-22, 2011. Title: Pluripotent Stem Cells
- The best Researcher in Royan Institute. Feb 2011: Title: Innovation of a new way for production of 150 mouse embryonic stem cell lines.
- The best oral presentation in Precongress of 11th Royan International Twin Congress, September 14, 2010. Title: Embryonic Pluripotent Stem Cell Lines and the Importance of Extrinsic Regulation.

9: Presentation

No	Title	Presenter	Location	Pres.	Date
1.	Characterization of Advanced Therapy Medicinal Products: Manufacturing of Mesenchymal Stromal Cell for Therapy as a Successful Model	Seyedeh Nafiseh Hassani	PCMD-Royan webinar series	Oral presentation	Sep 2022
2.	Challenges and Processes for Development of GMP-Grade Human Embryonic Stem Cells.	Seyedeh Nafiseh Hassani	Royan International E-Summer School on Advanced Therapy Medicinal Products: Application of Biological Science	Oral presentation	July 2021
3.	Mesenchymal Stromal Cells as Therapeutic Tools in Regenerative Medicine	Seyedeh Nafiseh Hassani	Royan TESMA international joint Webinar on Tissue Engineering and Regenerative Medicine	Oral presentation	April 2021
4.	Potential and Challenges of Pluripotent Embryonic Stem Cells in Treatment of Human Diseases	Seyedeh Nafiseh Hassani	1 th ITERM	Oral presentation (invited speaker)	July 2018
5.	Induction of human naïve pluripotency by a novel chemical approach	Seyedeh Nafiseh Hassani,	2nd International Stem cells and regenerative congress	Oral presentation (invited speaker)	April 2017
6.	Inhibition of TGF- β signaling sustains embryonic stem cell self-renewal	Seyedeh Nafiseh Hassani	2nd International & 14th Iranian Genetics Congress	Oral presentation (invited speaker)	May 2016
7.	Suppression of Transforming	Seyedeh Nafiseh Hassani,	1th ISERB International	Oral presentation	May 2015

No	Title	Presenter	Location	Pres.	Date
	Growth Factor β Signaling Promotes Ground State Pluripotency from Single Blastomeres		Congress, Tehran, Iran		
8.	The Augmented BMP Pluripotency Pathway via TGF- β Suppression Maintains the Ground State of Embryonic Stem Cells Self-Renewal	Seyedeh Nafiseh Hassani,	15 th Royan International Research Award, Royan Institute, Tehran, Iran	Oral presentation	Aug 2014
9.	Efficient Generation of Human Embryonic Stem Cells from Single Blastomeres of poor-quality cleavage embryos	Dr Hossein Baharvand, Adeleh Taei, Seyedeh Nafiseh Hassani , Dr Poopak Eftekhari Yazdi, Dr M. Nokhbatolfoghahaei, Dr H. Gourabi	12th International conference of preimplantation genetic diagnosis	Oral presentation	May 2013
10.	Molecular tracing of mES cell derivation from blastocysts in the presence of TGF β and Erk signaling inhibitors	Mehdi Totonchi, Seyedeh Nafiseh Hassani , Mojtaba Rezazadeh Valojerdi, Dr Poopak Eftekhari Yazdi, Dr H. Gourabi, Dr H. Baharvand	14th Royan International Twin Congress, Royan Institute, Tehran, Iran	Poster	Aug 2013
11.	Analysis of the chromosomal stability and micronuclei formation of mouse embryonic stem cell in medium containing R2i (TGF-B and ERK1, 2 Inhibitor) and 2i (GSK-3 and ERK1,2 Inhibitors)	Najmeh Sadat Masoudi, Dr H. Baharvand, Seyedeh Nafiseh Hassani , Dr Anahita Mohseni Meybodi, S. Mollamohammadi, Sh. Zarei Moradi, Z. Mansouri, Dr H. Gourabi	14th Royan International Twin Congress, Royan Institute, Tehran, Iran	Poster	Aug 2013
12.	Comparison of the chromosomal stability of mouse embryonic stem cell	Najmeh Sadat Masoudi, Dr H. Baharvand, Seyedeh Nafiseh Hassani , Dr	14th Royan International Twin Congress,	Poster	Aug 2013

No	Title	Presenter	Location	Pres.	Date
	in medium containing R2i(TGF-B and ERK1,2 inhibitors)by karyotyping	Anahita Mohseni Meybodi, S. Mollamohammadi, Sh. Zarei Moradi, Z. Mansouri, Dr H. Gourabi	Royan Institute, Tehran, Iran		
13.	Inhibition of TGF- β signaling could substitute the inhibition of multifunctional GSK3 in naïve mouse embryonic stem cells	Seyedeh Nafiseh Hassani , Mehdi Totonchi, Sepideh Mollamohamadi, Azam Samadian, Mohamad Pakzad, Hossein Baharvand, Hamid Gourabi	10th ISSCR Annual Meeting, Yokohama, Japan	Poster	June 13-16, 2012
14.	Efficient Derivation of Pluripotent Stem Cells From Neonatal Mouse Testis Using Small Molecules	Faezeh Moraveji, F. Attari, A. Shahverdi, H. Sepehri, A. Farrokhi, Seyedeh Nafiseh Hassani , H. Fonoudi, N. Aghdami, Dr H. Baharvand	10th ISSCR Annual Meeting, Yokohama, Japan	Poster	June 13-16, 2012
15.	Pluripotent Stem Cells	Seyedeh Nafiseh Hassani ,	The 3rd Royan International Summer School, Royan Institute, Tehran, Iran	Oral presentation	14 Jul 2012
16.	Tracing the derivation of mouse embryonic stem cells from blastocysts in the presence of TGF- β and erk signaling inhibitors	Mehdi Totonchi, Seyedeh Nafiseh Hassani , M. Rezazadeh, P. Eftekhari, H. Gourabi, H. Baharvand	Cell Symposia: Stem Cell Programming & Reprogramming, Portugal	Poster	Dec 2011
17.	Pluripotent Stem Cells	Seyedeh Nafiseh Hassani	The 2nd Royan International Summer School	Oral presentation	17 Jul 2011
18.	Pluripotent Stem Cells: Identity, Origin and Challengeable issues	Seyedeh Nafiseh Hassani	3th of Royan Stem Cells Precongress,, Royan Institute, Tehran, Iran	Oral presentation	6 Sep 2011

No	Title	Presenter	Location	Pres.	Date
19.	The Application of Stem Cells in Embryology		1th Symposium of Embryology, Royan Institute, Tehran, Iran	Oral presentation	24 Feb 2011
20.	From Stem Cells to Germ Cells	Seyedeh Nafiseh Hassani	The 1nd Royan International Summer School	Oral presentation	12 Jul 2010
21.	Embryonic Pluripotent Stem Cell Lines and the Importance of Extrinsic Regulation	Seyedeh Nafiseh Hassani	2th of Royan Stem Cells Precongress,. Royan Institute, Tehran, Iran	Oral presentation	13 Sep 2010
22.	Establishment of human induced Pluripotent stem cells from retinal specific Disorders	Hassani, Nafiseh, Totonchi, Mehdi, Tae, Adeleh, Seifinejad, Ali, Gourabi, Hamid, Aghdami, Nasser, Hosseini Salekdeh, Ghasem, Baharvand, Hossein	7th ISSCR Annual Meeting Barcelona, Spain	Poster	Jully 8-11, 2009
23.	Amastin signature is highly antigenic inactive stage of visceral leishmaniasis	Sima Rafati, H Movassagh, Nafiseh Hassani , Yasaman Taslimi, Fatemeh Doustari	16th European Congress of Immunology– ECI,	Poster	September 6-9, 2006 - Paris, France
24.	Leishmania major heat shock protein 70 and sera reactivity of cutaneous and visceral Leishmaniasis individuals	Nafiseh Hassani , Elham Gholami, Fatemeh Ghaemimanesh, Yasaman Taslimi, Sima Rafati	8th Iranian congress of immunology and allergy	Poster	May 14-16, 2006- Tehran, Iran
25.	Cloning, expression of L.major Heat Shock Protein 70 (LmHSP70) and evaluation of its potential protection	Elham Gholami, Nafiseh Hassani , Fatemeh Ghaemimanesh, Sima Rafati	8th Iranian congress of immunology and allergy	Poster	May 14-16, 2006- Tehran, Iran

No	Title	Presenter	Location	Pres.	Date
	in the murine models				

10: Publication

- **Book**

1. Pluripotent Stem Cells; Stem Cells and Regenerative Medicine Book Series. Hossein Baharvand, **Seyedeh-Nafiseh Hassani**. HBio Publisher. 1398. 978-600-9736-94-2.

- **Articles**

1. Narges Karami, Adeleh Taei, **Seyedeh Nafiseh Hassani**, Nazanin Alizadeh, Poopak Eftekhari-Yazdi, Fatemeh Hassani. The effects of insulin-transferrin-selenium (ITS) and CHIR99021 on the development of pre-implantation human arrested embryos in vitro. *Scientific Reports*. 2025 Feb 11;15(1):5006. doi: 10.1038/s41598-025-89460-9.
2. Hedi Poorkazem, Maryam Saber, Azadeh Moradmand, Saeed Yakhkeshi, Homeyra Seydi, Ensiyeh Hajizadeh-Saffar, Faezeh Shekari, **Seyedeh-Nafiseh Hassani***. *Comparative effects of various extracellular vesicle subpopulations derived from clonal mesenchymal stromal cells on cultured fibroblasts in wound healing-related process*. *The International Journal of Biochemistry & Cell Biology*. 2025 Jan 17;106737. doi: 10.1016/j.biocel.2025.106737.
3. Ahmadreza Jamshidi, Alireza Beheshti Maal, Majid Alikhani, Hoda Madani, Bahareh Sadri, Maryam Moghaddassi, Ahmad Salimzadeh, Mahtab Ahmadipour, Mohammad Amin Shahrbafe, Ensiyeh Hajizadeh-Saffar, Mohamadreza Baghaban Eslaminejad, **Seyedeh-Nafiseh Hassani**, Leila Taghiyar, Fatemeh Abbasi, Hossein Baharvand, Massoud Vosough. *Allogeneic bone marrow derived clonal mesenchymal stromal cells in refractory rheumatoid arthritis: a pilot study*. *Regenerative Medicine*. 2024 Dec;19(12):599-609. doi: 10.1080/17460751.2024.2443352.
4. Adeleh Taei, Fatemeh-Sadat Sajadi, Sarvenaz Salahi, Zahra Enteshari, Nasrin Falah, Zahra Shiri, Saeed Abasalizadeh, Ensiyeh Hajizadeh-Saffar, **Seyedeh-Nafiseh Hassani***, Hossein Baharvand. The cell replacement therapeutic potential of human pluripotent stem cells. *Expert Opinion on Biological Therapy*. 2025 Jan;25(1):47-67. doi: 10.1080/14712598.2024.2443079.
5. Shayan Farzanbakhsh, Mohammad Reza Amini, Hoda Madani, Bahareh Sadri, **Seyedeh Nafiseh Hassani**, Nasrin Fallah, Azam Samadian, Raheleh Aghdami, Zahra Khalajasadi, Hossein Baharvand, Massoud Vosough, Ensiyeh Hajizadeh-Saffar. *Safety evaluation of bi-layered allogenic keratinocyte and fibroblast skin substitute for diabetic foot ulcers-SAFESKIN-DFU: A Phase I clinical trial*. *Diabetes, Obesity & Metabolism*. 2024 Nov;26(11):5078-5086. doi: 10.1111/dom.15843.

6. Mahnaz Babaahmadi, Nima Makvand Gholipour, Behnoosh Tayebi, Jed Pheneger, Ensiyeh Hajizadeh-Saffar, Mohamadreza Baghaban Eslaminejad, **Seyedeh-Nafiseh Hassani***. *Clinical Evaluation of Collagen-Induced Arthritis in Female Lewis Rats: A Comprehensive Analysis of Disease Progression and Severity*. Cell Journal. 2023 Dec 31;25(12):854-862. doi: 10.22074/cellj.2023.2004504.1326.
7. Mohammad A Sabeti, Mohammad Saqib Ihsan, Dina Adami, **Seyedeh-Nafiseh Hassani**, Siavash Moushekhian, Reihaneh Shafieian, Hamideh Salari Sedigh, Jamileh Ghoddusi. *Cell-Based Regenerative Endodontics for the Treatment of Irreversible Pulpitis: An In Vivo Investigation*. Journal of Endodontics. 2024 Mar;50(3):344-350. doi: 10.1016/j.joen.2023.11.014.
8. Mahnaz Babaahmadi, Behnoosh Tayebi, Nima Makvand Gholipour, Mehrnaz Tayebi Kamardi, Sahel Heidari, Hossein Baharvand, Mohamadreza Baghaban Eslaminejad, Ensiyeh Hajizadeh-Saffar, **Seyedeh-Nafiseh Hassani***. *Rheumatoid arthritis: the old issue, the new therapeutic approach*. Stem Cell Research and Therapy. 2023 Sep 23;14(1):268. doi: 10.1186/s13287-023-03473-7.
9. Somayeh Naderi, Zahra Shiri, Masoumeh Zarei-Kheirabadi, Sepideh Mollamohammadi, Parastoo Hosseini, Golnoosh Rahimi, Azadeh Moradmand, Azam Samadian, Amir Shojaei, Meghdad Yeganeh, Seyed Ahmad Mousavi, Motahare Badri, Adeleh Taei, **Seyedeh-Nafiseh Hassani**, Hossein Baharvand. *Cryopreserved clinical-grade human embryonic stem cell-derived dopaminergic progenitors function in Parkinson's disease models*. Life Sciences. 2023 Jul 29;329:121990. doi: 10.1016/j.lfs.2023.121990. Online ahead of print.
10. Masumeh Zare, Seyed Ziaeddin Mirhoseini, Shahrokh Ghovvati, Saeed Yakhkeshi, Mahdi Hesarakhi, Mojgan Barati, Forough Azam Sayyehpour, Hossein Baharvand, **Seyedeh-Nafiseh Hassani***. *The constitutively active pSMAD2/3 relatively improves the proliferation of chicken primordial germ cells*. Molecular Reproduction and Development. 2023 Jun;90(6):339-357. doi: 10.1002/mrd.23689. Epub 2023 Jun 28.
11. Morteza Zarrabi, Mohammad Amin Shahrabaf, Masoumeh Nouri, Faezeh Shekari, Seyedeh-Esmat Hosseini, Seyed-Mohammad Reza Hashemian, Rasoul Aliannejad, Hamidreza Jamaati, Naghmeh Khavandgar, Hediye Alemi, Hoda Madani, Abdoreza Nazari, Azadeh Amini, **Seyedeh Nafiseh Hassani**, Fatemeh Abbasi, Neda Jarooghi, Nasrin Fallah, Leila Taghiyar, Meysam Ganjibakhsh 7, Ensiyeh Hajizadeh-Saffar, Massoud Vosough, Hossein Baharvand. *Allogenic mesenchymal*

- stromal cells and their extracellular vesicles in COVID-19 induced ARDS: a randomized controlled trial*. Stem Cell Research and Therapy. 2023 Jun 26;14(1):169. doi: 10.1186/s13287-023-03402-8.
12. Behnoosh Tayebi, Mohamamd Molazem, Mahnaz Babaahmadi, Erfan Ebrahimi, Mostafa Hajinasrollah, Farhad Mostafaei, Nima Makvand Gholipour, Hossein Baharvand, Mohamad Reza Baghaban Eslaminejad, **Seyedeh-Nafiseh Hassani***, Ensiyeh Hajizadeh-Saffar. *Comparison of Ultrasound-Guided Percutaneous and Open Surgery Approaches in The Animal Model of Tumor Necrosis Factor-Alpha-Induced Disc Degeneration*. Cell Journal. 2023 May 28;25(5):338-346. doi: 10.22074/cellj.2023.1972610.1168.
 13. Nasim Eslami, Khadijeh Bahrehbar, Fereshteh Esfandiari, Faezeh Shekari, **Seyedeh-Nafiseh Hassani**, Abdoreza Nazari, Mohammad Pakzad, Hossein Baharvand. *Regenerative potential of different extracellular vesicle subpopulations derived from clonal mesenchymal stem cells in a mouse model of chemotherapy-induced premature ovarian failure*. Life Sciences. 2023 May 15;321:121536. doi: 10.1016/j.lfs.2023.121536. Epub 2023 Mar 1.
 14. Mahnaz Babaahmadi, Behnoosh Tayebi, Nima Makvand Gholipour, Phillip Bendele, Jed Pheneger, Abolfazl Kheimeh, Amir Kamali, Mohammad Molazem, Hossein Baharvand, Mohamadreza Baghaban Eslaminejad, Ensiyeh Hajizadeh-Saffar, **Seyedeh-Nafiseh Hassani***. *Long-term passages of human clonal mesenchymal stromal cells can alleviate the disease in the rat model of collagen-induced arthritis resembling early passages of different heterogeneous cells*. Journal of Tissue Engineering and Regenerative Medicine. 2022 Nov 27. doi: 10.1002/term.3368. Online ahead of print.
 15. Farzaneh Khani, Simin Nafian, Sepideh Mollamohammadi, Shiva Nemati, Bahare Shokoohian, **Seyedeh Nafiseh Hassani**, Hossein Baharvand, Hamid Reza Soleimanpour-Lichaei, Ghasem Hosseini Salekdeh. *Y Chromosome Genes May Play Roles in the Development of Neural Rosettes from Human Embryonic Stem Cells*. Stem Cell Reviews and Reports. 2022 Dec;18(8):3008-3020. doi: 10.1007/s12015-022-10392-2. Epub 2022 Jun 3.
 16. Sara Taleahmad, Ali Salari, Azam Samadian, Se Hyun Chae, Daehee Hwang, Bonghee Lee, Delger Bayarsaikhan, Govigerel Bayarsaikhan, Jaesuk Lee, Ji Hwan Park, **Seyedeh-Nafiseh Hassani**, Hossein Baharvand, Ghasem Hosseini Salekdeh. *BMP4 signaling plays critical roles in self-renewal of R2i mouse embryonic stem cells*. Biochemical and Biophysical Research Communications. 2022 Aug 20;617(Pt 1):8-15. doi: 10.1016/j.bbrc.2022.05.036.

17. Nazanin Sadat Khademi, Shirin Farivar, Masood Bazrgar, **Seyedeh-Nafiseh Hassani**, Najmeh Sadat Masoudi, Newsha Haghparast, Mehran Rezaei Larijani. *Aneuploidy rate and Stemness in Low-level Mosaic Human Embryonic Stem Cells in the Presence/Absence of Bortezomib, Paclitaxel and Lapatinib*. Cells Tissues Organs. 2022 Jul 28. doi: 10.1159/000526199. Online ahead of print.
18. Behnoosh Tayebi, Mahnaz Babaahmadi, Mohammad Pakzad, Mostafa Hajinasrollah, Farhad Mostafaei, Shahrbanoo Jahangiri, Amir Kamali, Hossein Baharvand, Mohamadreza Baghaban Eslaminejad, **Seyedeh-Nafiseh Hassani***, Ensiyeh Hajizadeh-Saffar. *Standard toxicity study of clinical-grade allogeneic human bone marrow-derived clonal mesenchymal stromal cells*. Stem Cell Research and Therapy. 2022 May 26;13(1):213. doi: 10.1186/s13287-022-02899-9.
19. Mohammad Pakzad, **Seyedeh Nafiseh Hassani***, Fatemeh Abbasi, Ensiyeh Hajizadeh-Saffar, Leila Taghiyar, Nasrin Fallah, Newsha Haghparast, Azam Samadian, Meysam Ganjibakhsh, Massimo Dominici, Hossein Baharvand. *A Roadmap for the Production of a GMP-Compatible Cell Bank of Allogeneic Bone Marrow-Derived Clonal Mesenchymal Stromal Cells for Cell Therapy Applications*. Stem Cell Reviews and Reports. 2022 Feb 17:1-17. doi: 10.1007/s12015-022-10351-x
20. Farideh Moeinvaziri, Amir Shojaei, Newsha Haghparast, Saeed Yakhkeshi, Shadman Nemati, **Seyedeh-Nafiseh Hassani**, Hossein Baharvand. *Towards maturation of human otic hair cell-like cells in pluripotent stem cell-derived organoid transplants*. Cell and Tissue Research. 2021 Nov;386(2):321-333.
21. Mojgan Barati, Maryam Akhondi, Narges Sabahi Mousavi, Newsha Haghparast, Asma Ghodsi, Hossein Baharvand, Marzieh Ebrahimi, **Seyedeh-Nafiseh Hassani***. *Pluripotent Stem Cells: Cancer Study, Therapy, and Vaccination*. Stem Cell Reviews and Reports. 2021 Dec;17(6):1975-1992.
22. Roghayeh Navabi, Babak Negahdari, Ensiyeh Hajizadeh-Saffar, Mostafa Hajinasrollah, Yaser Jenab, Shahram Rabbani, Mohamad Pakzad, **Seyedeh-Nafiseh Hassani**, Maryam Hezavehei, Mohammad Jafari-Atrabi, Yaser Tahamtani, Hossein Baharvand. *Combined therapy of mesenchymal stem cells with a GLP-1 receptor agonist, liraglutide, on an inflammatory-mediated diabetic non-human primate model*. Life Sciences. 2021 Jul 1;276:119374. doi: 10.1016/j.lfs.2021.119374.
23. Simin Nafian Dehkordi, Farzaneh Khani, **Seyedeh Nafiseh Hassani**, Hossein Baharvand, Hamid Reza Soleimanpour-Lichaei, Ghasem Hosseini Salekdeh. *The Contribution of Y Chromosome*

Genes to Spontaneous Differentiation of Human Embryonic Stem Cells into Embryoid Bodies in Vitro. Cell Journal. 2021 Apr;23(1):40-50.

24. Roya Ramezankhani, Shukoofeh Torabi, Neda Minaei, Hoda Madani, Siamak Rezaeiani, **Seyedeh-Nafiseh Hassani**, Adrian P Gee, Massimo Dominici, Daniela Nascimento Silva, Hossein Baharvand, Ensiyeh Hajizadeh-Saffar. *Two Decades of Global Progress in Authorized Advanced Therapy Medicinal Products: An Emerging Revolution in Therapeutic Strategies*. Frontiers in Cell and Developmental Biology. 2020 Dec 17;8:547653. doi: 10.3389/fcell.2020.547653. eCollection 2020.
25. Azimeh Akhlaghpour, Adeleh Taei, Seyyed Abolghasem Ghadami, Zahra Bahadori, Saeed Yakhkeshi, Sepideh Molamohammadi, Tahereh Kiani, Azam Samadian, Zahra Ghezelayagh, Newsha Haghpour, Keynoosh Khalooghi, Thomas Braun, Hossein Baharvand, **Seyedeh-Nafiseh Hassani***. *Chicken Interspecies Chimerism Unveils Human Pluripotency*. Stem Cell Reports. 2021 Jan 12;16(1):39-55.
26. Adeleh Taei, Tahereh Kiani, Zeinab Taghizadeh, Sharif Moradi, Azam Samadian, Sepideh Mollamohammadi, Ali Sharifi-Zarchi, Stefan Guenther, Azimeh Akhlaghpour, Behrouz Asgari Abibeiglou, Mostafa Najjar-Asl, Razieh Karamzadeh, Keynoosh Khalooghi, Thomas Braun, **Seyedeh-Nafiseh Hassani***, Hossein Baharvand. *Temporal activation of LRH-1 and RAR- γ in human pluripotent stem cells induces a functional naïve-like state*. EMBO Reports. 2020 Oct 5;21(10):e47533.
27. Banafsheh Mirzaei-Seresht, Masood Bazrgar, Masoud Sheidai, **Seyedeh-Nafiseh Hassani**, Najmeh Sadat Masoudi, Sepideh Mollammohammadi. *Chromosomal instability reducing effect of paclitaxel and lapatinib in mouse embryonic stem cells with chromosomal abnormality*. Molecular Biology Reports. 2020 Nov;47(11):8605-8614.
28. Khadijeh Bahrehbar, Mojtaba Rezazadeh Valojerdi, Fereshteh Esfandiari, Rouhollah Fathi, **Seyedeh-Nafiseh Hassani**, Hossein Baharvand. *Human embryonic stem cell-derived mesenchymal stem cells improved premature ovarian failure*. World Journal of Stem Cells. 2020 Aug 26;12(8):857-878.
29. Adeleh Taei, Azam Samadian, Zahra Ghezelayagh, Sepideh Mollamohammadi, Sharif Moradi, Tahereh Kiani, Ehsan Janzamin, Zahra Farzaneh, Yaser Tahamtani, Thomas Braun, **Seyedeh-Nafiseh Hassani***, Hossein Baharvand. *Suppression of p38-MAPK endows endoderm propensity*

to human embryonic stem cells. Biochemical and Biophysical Research Communications. 2020 Jun 30;527(3):811-817.

30. Adeleh Taei, Paniz Rasooli, Thomas Braun, **Seyedeh-Nafiseh Hassani***, Hossein Baharvand. *Signal regulators of human naïve pluripotency*. Experimental Cell Research. 2020 Apr 15;389(2):111924. doi: 10.1016/j.yexcr.2020.111924.
31. Saman Firoozi, Sara Pahlavan, Mohammad-Hossein Ghanian, Shahram Rabbani, Maryam Barekat, Abdoreza Nazari, Mohammad Pakzad, Faezeh Shekari, **Seyedeh-Nafiseh Hassani**, Fariba Moslem, Fatemeh Nobakht Lahrood, Mansoureh Soleimani, Hossein Baharvand. *Mesenchymal stem cell-derived extracellular vesicles alone or in conjunction with a SDKP-conjugated self-assembling peptide improve a rat model of myocardial infarction*. Biochemical and Biophysical Research Communications. 2020 Apr 16;524(4):903-909.
32. Samaneh Poursaeid, Mohammad-Reza Kalbassi, **Seyedeh-Nafiseh Hassani**, Hossein Baharvand. *Isolation, characterization, in vitro expansion and transplantation of Caspian trout (Salmo caspius) type a spermatogonia*. General and Comparative Endocrinology. 2020 Apr 1;289:113341. doi: 10.1016/j.ygcen.2019.113341.
33. Hossein Pourghadamyari, Mohammad Rezaei, Mohsen Basiri, Yaser Tahamtani, Behrouz Asgari, **Seyedeh-Nafiseh Hassani**, Reza Meshkani, Taghi Golmohammadi, Hossein Baharvand. *Generation of a Transgenic Zebrafish Model for Pancreatic Beta Cell Regeneration*. Galen Medical Journal. 2019 Nov 6;8:e1056. doi: 10.31661/gmj.v8i0.1056. eCollection 2019.
34. Sara Taleahmad, Mehdi Alikhani, Sepideh Mollamohammadi, Meisam Yousefi, Adeleh Taei, **Seyedeh-Nafiseh Hassani**, Hossein Baharvand, Ghasem Hosseini Salekdeh. *Inhibition of Human Y Chromosome Gene, SRY, Promotes Naïve State of Human Pluripotent Stem Cells*. Journal of Proteome Research. 2019 Dec 6;18(12):4254-4261.
35. Hassan Rassouli, Mona Khalaj, **Seyedeh-Nafiseh Hassani**, Shiva Nemati, Ghasem Hosseini Salekdeh, Hossein Baharvand. *Gene Expression Patterns of Royan Human Embryonic Stem Cells Correlate with Their Propensity and Culture Systems*. Cell Journal. 2019 Oct;21(3):290-299.
36. **Seyedeh-Nafiseh Hassani**, Sharif Moradi, Sara Taleahmad, Thomas Braun, Hossein Baharvand. *Transition of inner cell mass to embryonic stem cells: mechanisms, facts, and hypotheses*. Cellular and Molecular Life Sciences. 2019 Mar;76(5):873-892.

37. Farshid Yekani, Mahnaz Azarnia, Fereshteh Esfandiari, **Seyedeh Nafiseh Hassani**, Hossein Baharvand. *Enhanced development of mouse single blastomeres into blastocysts via the simultaneous inhibition of TGF- β and ERK pathways in microdroplet culture*. Journal of Cellular Biochemistry. 2018 Sep;119(9):7621-7630.
38. Sara Taleahmad, **Seyedeh-Nafiseh Hassani**, Ghasem Hosseini Salekdeh, Hossein Baharvand. *Metabolic Signature of Pluripotent Stem Cells*. Cell Journal. 2018 Oct;20(3):388-395.
39. Maryam Farzaneh, Masoumeh Zare, **Seyedeh-Nafiseh Hassani***, Hossein Baharvand. *Effects of Various Culture Conditions on Pluripotent Stem Cell Derivation from Chick Embryos*. Journal of Cellular Biochemistry. 2018 Aug;119(8):6325-6336.
40. Soura Mardpour, **Seyedeh-Nafiseh Hassani**, Saeid Mardpour, Forough Sayahpour, Massoud Vosough, Jafar Ai, Nasser Aghdami, Amir Ali Hamidieh, Hossein Baharvand. *Extracellular Vesicles Derived from Human Embryonic Stem Cell-MSCs Ameliorate Cirrhosis in Thioacetamide-Induced Chronic Liver Injury*. Journal of Cellular Physiology. 2018 Dec;233(12):9330-9344.
41. Saeed Yakhkeshi, Shaban Rahimi, Mohsen Sharafi, **Seyedeh-Nafiseh Hassani**, Sara Taleahmad, Abdolhossein Shahverdi, Hossein Baharvand. *In Vitro Improvement of Quail Primordial Germ Cell Expansion through Activation of TGF-beta Signaling Pathway*. Journal of Cellular Biochemistry. 2018 Jun;119(6):4309-4319.
42. Mehdi Totonchi, **Seyedeh-Nafiseh Hassani[#]**, Ali Sharifi-Zarchi, Natalia Tapia, Kenjiro Adachi, Julia Arand, Boris Greber, Davood Sabour, Marcos J. Araúzo-Bravo, Jörn Walter, Mohammad Pakzad, Hamid Gourabi, Hans R. Schöler, Hossein Baharvand. *Blockage of the Epithelial-to-Mesenchymal Transition Is Required for Embryonic Stem Cell Derivation*. Stem Cell Reports. 2017 Oct 10;9(4):1275-1290.
43. **Seyedeh-Nafiseh Hassani**, Hadi Rezaeeyan, Asma Ghodsi, Najmaldin Saki. *Restoration of natural killer cell cytotoxicity in the suppressive tumor microenvironment: novel approaches to treat AML*. Journal of Hematopathology. 2017. 10(3-4):109-116.
44. Sara Taleahmad, Mirzaei M, Azam Samadian, **Seyedeh-Nafiseh Hassani**, Haynes PA, Ghasem Hosseini Salekdeh, Hossein Baharvand. *Low Focal Adhesion Signaling Promotes Ground State Pluripotency of Mouse Embryonic Stem Cells*. Journal of Proteome Research. 2017 Oct 6;16(10):3585-3595.

45. Maryam Farzaneh, **Seyedeh-Nafiseh Hassani***, Paul Mozdziak, Hossein Baharvand. *Avian embryos and related cell lines: A convenient platform for recombinant proteins and vaccine production*. Biotechnology Journal. 2017 May;12(5). doi: 10.1002/biot.201600598.
46. Hadi Rezaeeyan, **Seyedeh Nafiseh Hassani**, Mojgan Barati, Mohammad Shahjahani, Najmaldin Saki. *PD-1/PD-L1 as a prognostic factor in leukemia*. Journal of Hematopathology. 2017. 10(17). <https://doi.org/10.1007/s12308-017-0293-z>
47. Hendudari F, Piryaee A, **Seyedeh-Nafiseh Hassani**, Darbandi H, Bayat M. *Combined effects of low-level laser therapy and human bone marrow mesenchymal stem cell conditioned medium on viability of human dermal fibroblasts cultured in a high-glucose medium*. Lasers in Medical Sciences. 2016 May;31(4):749-57.
48. Taleahmad S, Mirzaei M, Parker LM, **Seyedeh-Nafiseh Hassani**, Mollamohammadi S, Sharifi-Zarchi A, Haynes PA, Baharvand H, Salekdeh GH. *Proteome Analysis of Ground State Pluripotency*. Scientific Reports. 2015 Dec 16;5:17985. doi: 10.1038/srep17985
49. Alireza Mohammadi, Farnoosh Attari, Vahab Babapour, **Seyedeh-Nafiseh Hassani**, Najmehsadat Masoudi, Abdolhossein Shahverdi, Hossein Baharvand. *Generation of Rat Embryonic Germ Cells via Inhibition of TGF β and MEK Pathways*. Cell Journal. 2015 17(2): 288–295.
50. **Seyedeh-Nafiseh Hassani**, Mohammad Pakzad, Behrooz Asgari, Adeleh Taei, Hossein Baharvand. *Suppression of transforming growth factor β signaling promotes ground state pluripotency from single blastomeres*. Human Reproduction (Oxford, England). 2014 Aug 29(8): 1739-48.
51. Farnoosh Attari, Hoori Sepehri, Hassan Ansari, **Seyedeh-Nafiseh Hassani**, Fereshteh Esfandiari, Behrooz Asgari, Abdolhossein Shahverdi. *Efficient Induction of Pluripotency in Primordial Germ Cells by Dual Inhibition of TGF β and ERK Signaling Pathways*. Stem Cells and Development. 2014 May 15; 23(10): 1050-61.
52. **Seyedeh-Nafiseh Hassani**, Mehdi Totonchi, Hamid Gourabi, Hans R. Schöler, Hossein Baharvand. *Signaling Roadmap Modulating Naïve and Primed Pluripotency*. Stem Cells and Development. 2014 Feb 1;23(3):193-208.
53. **Seyedeh-Nafiseh Hassani**, Mehdi Totonchi, Ali Sharifi-Zarchi, Sepideh Mollamohammadi, Mohammad Pakzad, Sharif Moradi, Azam Samadian, Najmehsadat Masoudi, Shahab Mirshahvaladi, Ali Farrokhi, Boris Greber, Marcos J. Araúzo-Bravo, Davood Sabour, Mehdi

- Sadeghi, Ghasem Hosseini Salekdeh, Hamid Gourabi, Hans R. Schöler , Hossein Baharvand. *Inhibition of TGF β Signaling Promotes Ground State Pluripotency*. Stem Cell Reviews and Reports. 2014 Feb;10(1):16-30.
54. Adeleh Taei, **Seyedeh-Nafiseh Hassani**, Poopak Eftekhari-Yazdi, Mojtaba Rezazadeh Valojerdi, Mohsen Nokhbatolfoghahaei, Najmeh-Sadat Masoudi, Mohammad Pakzad, Hamid Gourabi, Hossein Baharvand. *Enhanced generation of human embryonic stem cells from single blastomeres of fair and poor-quality cleavage embryos via inhibition of glycogen synthase kinase β and Rho-associated kinase signaling*. Human Reproduction (Oxford, England). 2013 Oct;28(10):2661-71.
 55. Hossein Baharvand, **Seyedeh-Nafiseh Hassani**. *A new chemical approach to the efficient generation of mouse embryonic stem cells*. Methods in Molecular Biology (Clifton, N.J.). 2013;997:13-22.
 56. Seyedeh-Faezeh Moraveji, Farnoosh Attari, Abdolhossein Shahverdi, Houri Sepehri, Ali Farrokhi, **Seyedeh-Nafiseh Hassani**, Hananeh Fonoudi, Nasser Aghdami, Hossein Baharvand. *Inhibition of glycogen synthase kinase-3 promotes efficient derivation of pluripotent stem cells from neonatal mouse testis*. Human Reproduction (Oxford, England). 2012 Aug;27(8):2312-24.
 57. **Seyedeh-Nafiseh Hassani**, Mehdi Totonchi, Ali Farrokhi Adeleh Taei, Mehran Rezaei Larijani, Hamid Gourabi, Hossein Baharvand. *Simultaneous Suppression of TGF- β and ERK Signaling Contributes to the Highly Efficient and Reproducible Generation of Mouse Embryonic Stem Cells from Previously Considered Refractory and Non-permissive Strains*. Stem Cell Reviews and Reports. 2012 Jun; 8(2):472-81.
 58. Azadeh Zahabi, Ebrahim Shahbazi, Hamideh Ahmadi, **Seyedeh-Nafiseh Hassani**, Mehdi Totonchi, Adeleh Taei, Najmeh Masoudi, Marzieh Ebrahimi, Naser Aghdami, Ali Seifinejad, F Mehrnejad, N Daftarian, Ghasem HosseiniSalekdeh, Hossein Baharvand. *A New Efficient Protocol for Directed Differentiation of Retinal Pigmented Epithelial Cells from Normal and Retinal Disease Induced Pluripotent Stem Cells*. Stem Cells and Development. 2012 Aug 10;21(12):2262-72.
 59. Mohammad Pakzad, Mehdi Totonchi, Adeleh Taei, Ali Seifinejad, **Seideh-Nafiseh Hassani**, Hossein Baharvand. *Presence of a ROCK inhibitor in Extracellular Matrix Supports More Undifferentiated Growth of Feeder-Free Human Embryonic and Induced Pluripotent Stem Cells upon Passaging*. Stem Cell Reviews and Reports. 2010; 6(1):96-107.

60. Ali Seifinejad, Adeleh Taei, Mehdi Totonchi, Hamed Vazirinasab, **Seideh-Nafiseh Hassani**, Nasser Aghdami, Ebrahim Shahbazi, Ghasem Hosseini Salekdeh, Hossein Baharvand. *Generation of Human Induced Pluripotent Stem Cells from a Bombay Individual: Moving Towards "Universal-Donor" Red Blood Cells*. Biochemical and Biophysical Research Communications. 2010; 391:329-34.
61. Sima Rafati, Elham Gholami, **Nafiseh Hassani**, Fatemeh Ghaemimanesh, Yasaman Taslimi, Tahereh Taheri, Lynn Soong. *Leishmania major heat shock protein 70 (HSP70) is not protective in murine models of cutaneous Leishmaniasis and stimulates strong humoral responses in cutaneous and visceral leishmaniasis patients*. Vaccine. 2007; 25:4159–4169.
62. Sima Rafati, **Nafiseh Hassani**, Yasaman Taslimi, Hesam Movassagh, Annie Rochette, and Barbara Papadopoulou. *AmastinPeptide-Binding Antibodies as Biomarkers of Active Human Visceral Leishmaniasis*. Clinical and Vaccine Immunology. 2006; 13:1104–1110.

• Research Articles in Persian:

۱. تخصصی شدن ساختارهای شبه هماتو-اندوتلیال و تولید سلول‌های پیش‌ساز خونی از سلول‌های بنیادی پرتوان انسانی. مژگان براتی، مرضیه ابراهیمی، سیده نفیسه حسنی. مجله دانشگاه علوم پزشکی مازندران. دی ۱۴۰۱. جلد ۳۲ شماره ۲۱۶ صفحات ۱-۱۹.
۲. تأثیر سه داروی ضدسرطان بر ترمومیب، پاکلیتاکسل و لاپاتینیب بر بنیادینگی و میزان آنوپلوئیدی در سلول‌های بنیادی جنینی انسانی. نازنین خادمی، شیرین فریور، مسعود بزرگر، سیده نفیسه حسنی، نجمه سادات مسعودی، فاطمه خرازی توکلی، نبوشا حق پرست، مهران رضایی، پرناز برجیان. مجله پژوهش‌های سلولی و مولکولی (مجله زیست‌شناسی ایران). ۱۴۰۰. جلد ۳۴ شماره ۱.
۳. تولید ماهی کایمر حاصل از پیوند درون صفاقی سلول‌های بنیادی اسپرماتوگونی SSCs ماهی آزاد دریای خزر (Salmo caspius) تازه تفریخ شده قزل‌آلای رنگین‌کمان. سمانه پورسعید، محمدرضا کلباسی، سیده نفیسه حسنی، گورو یوشیزاکی، حسین بهاروند. پاییز ۱۳۹۹. دوره ۱۱، شماره ۴. صفحات ۷۳-۵۵.
۴. مکان‌یابی و بیان رونوشت ژن vasa دریافت بیضه ماهی آزاد دریای خزر با شیوه هیبریداسیون در محل. سمانه پورسعید، محمدرضا کلباسی، سیده نفیسه حسنی، گورو یوشیزاکی، حسین بهاروند. فیزیولوژی و بیوتکنولوژی آبریان. ۱۳۹۶. سال هفتم، شماره اول.
۵. محیط کشت بهینه سلول‌های بنیادی مزانشیمی مغز استخوان انسان تابش لیزر کم‌توان موجب افزایش بیان فاکتور رشد در فیبروبلاست‌های دیابتی می‌شوند. عباس پیریایی، فرناز هندودری، محمد بیات، سیده نفیسه حسنی. پژوهش در پزشکی. ۱۳۹۴. دوره ۳۹، شماره ۴. صفحات ۱۶۲-۱۵۶.

۶. بررسی ترمیم و مطالعه کاربوتایپ در پلاناریای گونه *Schmidtea mediterranea*. آتوسا فلاحی، مانا احمد راجی، نجمه سادات مسعودی، مهناز آذرnia، سیده نفیسه حسنی. فصلنامه زیست شناسی تکوینی. سال هشتم، شماره ۱، زمستان ۱۳۹۴. صفحات: ۱۱-۱.
۷. مطالعه بیان ژن‌های پرتوانی در مراحل مختلف تکوین جنینی ماهی گورخری (*Danio rerio*). امیر حسین اسماعیلی، محمدرضا کلباسی، حسین بهاروند، سیده نفیسه حسنی. فیزیولوژی و تکنولوژی آبزیان. سال سوم، شماره اول، بهار ۱۳۹۴. صفحات: ۱۱۰-۹۳.
۸. بهبود تولید رده های سلولی پرتوان هاپلوئید از جنین های پارتنوژنتیک موش به واسطه مهار همزمان مسیرهای پیام رسانی Mek و $TGF\beta$. سپیده ملامحمدی، عبدالحسین شیروی، سیده نفیسه حسنی، حسین بهاروند. مجله سلول و بافت اراک. دوره ۶، شماره ۳، پاییز ۱۳۹۴، صفحات ۴۳۰-۴۲۱.
۹. بررسی تاثیر تغییرات اپی ژنتیکی بر فرآیند ترمیم پلاناریا با استفاده از تیمار به وسیله کوچک مولکول ها. مانا راجی، عبدالحسین شیروی، سیده نفیسه حسنی، حسین بهاروند. مجله سلول و بافت اراک. دوره ۶، شماره ۴، زمستان ۱۳۹۴، صفحه ۴۷۱-۴۸۰.

11: Referees

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