

# Yaser Tahamtani

Assistant Professor of Stem Cells and Developmental Biology

Principle Investigator at Royan Institute for Stem Cell Biology and Technology

Head of Developmental Biology Department at Science and Culture University

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## RESEARCH INTERESTS

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- Advanced Therapy Medicinal Products (ATMPs) for Diabetes and other Degenerative Diseases.
- Large-scale and clinical-grade production of the human pluripotent stem (hPS) cell derivatives for diabetes cell therapy.
- Cell and Organism Based Disease Modeling for Drug Screening.

## EDUCATION

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- **Kharazmi University-Royan Institute** Tehran, Iran 2008 – 2012  
Ph.D., Animal Cellular and Developmental Biology<sup>1</sup>
  - **Kharazmi University** Tehran, Iran 2004- 2008  
M.Sc., Animal Cellular and Developmental Biology
  - **Shiraz University** Shiraz, Iran 1999 – 2004  
B.Sc., Biology
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## POSITION OF RESPONSIBILITY

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**University of Science and Culture** December 2018- Present  
**Head of Developmental Biology Department**  
<http://usc.ac.ir/en>

- Member of Ph.D. and Master Admission committees which Admitted **10** Ph.D. and ~ **30** M.Sc. students during years **2018-2020**.
- Curriculum planning for Ph.D. and M.Sc. degrees
- Designing and planning “comprehensive exams” for PhD students during years **2018-2020**

**Royan Institute Center for Diabetes, Obesity and Metabolism** August 2018- Present  
**Principle Investigator and Board of Directors Member**  
[royandiabetes.org](http://royandiabetes.org)

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<sup>1</sup> The thesis entitled “Using small molecule to produce insulin producing cells from human embryonic stem cells”. Through this thesis two novel small molecules reported as the inducers of the Endodermal lineages in human embryonic stem cells and shown that these can lead to introduction new cell culture systems for production of insulin producing cells, hepatocytes and other endodermal derived cells and tissues for regenerative medicine approaches. A part of findings derived from the thesis has been published in Stem Cell and Development Journal (impact Factor at the time of publication= 4.6; Now= 3.0; <https://www.liebertpub.com/doi/abs/10.1089/scd.2012.0403>).

- Royan Institute Center for Diabetes, Obesity and Metabolism, is an interdisciplinary research center for research on Diabetes and other metabolic disorders. Raising funds from a Private Charity Foundation and Royan Institute.

**Royan Institute for Stem Cell Biology and Technology (RI-SCBT)- Tehran, Iran**

**February 2015 – Present**

***Assistant Professor of Stem Cells and Developmental Biology***

[royanstemcell.ir](http://royanstemcell.ir)

- As a Principle Investigator at Diabetes & Beta Cell Research Program, I have focused on 3 research areas: 1) pluripotent stem cell (PSC) derived insulin producing cells; 2) pancreatic beta cell/pancreatic islet biology and regeneration; and 3) patient-specific induced PSC and Diabetes modeling.

## **TEACHING EXPERIENCE**

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### **Supervision of Ph.D. and Master Thesis**

#### ***supervision / co-supervision of 4 Ph.D. dissertation; titles:***

- Production of pancreatic islet-like structures from human embryonic stem cells
- Generation of Tg(ins:GFP-NTR) transgenic zebrafish to study Diabetes
- Generation of pancreatic organoids using human fetal pancreatic mesenchymal cells
- To study Tauopathy in the diabetic mouse brain

#### ***supervision / co-supervision of 8 Master's students; titles:***

- Culturing pancreatic islet cells as an in-vitro model for drug screening
- Using ROSA26mRFP-mGFP transgenic embryonic stem cells as a cell lineage tracking system
- Transplantation of micro-encapsulated pancreatic islets in diabetic mice model
- Screening of the herbal derived molecules using Tg(ins:GFP-NTR) transgenic zebrafish model
- Differentiation of human embryonic stem cells into lung alveolar cells
- Using static suspension culture system to generate insulin producing cells from human pluripotent stem cells
- The effects of probiotics on pancreatic beta cell regeneration using transgenic Diabetes model
- A novel herbal combination to be studied on Type 1 Diabetes transgenic mouse model

#### ***Advisor/collaborator of >10 Ph.D. and Master's students***

### **Teaching**

#### ***Graduate level***

- Have taught a course on “Cell Signalling Mechanisms” to Ph.D. students of Developmental Biology for several years as part of the joint educational program between RI-SCBT and University of Science and Culture.
- Have taught a course on “Comparative Embryology and Developmental Biology” to M.Sc. students of Cell Biology, Genetics and Developmental Biology for several years as part of the joint educational program between RI-SCBT and University of Science and Culture.

#### ***Undergraduate level***

- Reproductive health and family planning course **5+** times to undergraduate students of Tehran University and Kharazmi University and zoology course **4+** times to undergraduate students of Shiraz University.

## **PROFESSIONAL EXPERIENCE**

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**Lotus Venture Capital Company**

**September 2017 – 2020**

### **Member of Scientific Supervisory Board**

- Lotus Venture Capital Company have funded several advanced therapeutic medicinal products in the field of cell therapy and regenerative medicine and a team of five scientists supervise the progress of these projects.

### **Iranian Food and Drug Administration (Iranian FDA)**

**October 2014 – 2020**

#### **Cell, Tissue and Gene Therapy Committee Member**

- As part of a 9-member committee, responsibilities include evaluating newly established biological products.
- Oversee the design and implementation of the clinical trials related to clinical grade cell products.
- Play a key role in creating the first Iranian “Guideline for Cell Therapy Products”.

### **Iranian Ministry of Health, Deputy of Research and Technology**

**September 2015 – 2020**

#### **Transgenic Animals for Biomedical Research Committee Member**

- The committee receives research proposals from researchers across the country on the subjects related to producing or maintaining transgenic models in biomedical research, and prioritizes research funding based on scientific evaluation of the proposals.

### **Royan Diabetes Clinic**

**April 2016- present**

#### **Member of advisory board**

- Direct a working group tasked with developing a feasibility study and business plan for Diabetes Clinic.
- Develop a patient flow (system or method, etc.) with world-class standard and work closely with the clinicians to devise innovative strategies aimed at maximizing excellence in patient care.

### **Royan Institute for Stem Cell Biology and Technology (RI-SCBT)**

**October 2016 – Present**

#### **Scientific Board Member**

- Evaluate submitted proposals by principle investigators as part of a 7-member Scientific Board to allocate RI-SCBT internal grant.
- Develop new management and supervisory guidelines for RI-SCBT’s Administrative Management System including the Financial, Human Resources, and Research Information areas.

### **Congresses and Scientific meetings**

- Scientific chair of 11<sup>th</sup> Royan International Congress; Royan Institute; Tehran; September 2015
- Scientific chair of 2<sup>nd</sup> FUMS Summer School; Fasa University of Medical School; Fars; September 2018
- Scientific chair of 11<sup>th</sup> Royan International E-Summer School (Postponed); Royan Institute; Tehran; December 2020

## **RESEARCH PUBLICATIONS & PATENTS**

### ***SCIENTIFIC PAPERS (based on publication time)***

- Li Y, **Tahamtani Y\***, Totonchi M, Chen CH, Hashemian SMR, Amoozegar F, Zhang JS, Gholampour Y, Li X. Challenges of Iranian Clinicians in Dealing with COVID-19: Taking Advantages of the Experiences in Wenzhou. [Cell J. 2020 Jul;22\(Suppl 1\):155-165. doi: 10.22074/cellj.2020.7604. Epub 2020 Jul 18.](#)
- Pahlavanneshan S, Behmanesh M, Oropeza D, Furuyama K, **Tahamtani Y**, Basiri M, Herrera PL, Baharvand H. Combined inhibition of menin-MLL interaction and TGF- $\beta$  signaling induces replication of human pancreatic beta cells. [Eur J Cell Biol. 2020 Jun;99\(5\):151094. doi: 10.1016/j.ejcb.2020.151094. Epub 2020 May 30. \(Q1 ranked; impact factor= 3\)](#)
- Taei A, Samadian A, Ghezel-Ayagh Z, Mollamohammadi S, Moradi S, Kiani T, Janzamin E, Farzaneh Z, **Tahamtani Y**, Braun T, Hassani SN, Baharvand H. Suppression of p38-MAPK endows endoderm propensity to human embryonic stem cells. [Biochem Biophys Res Commun. 2020 Jun 30;527\(3\):811-817. doi: 10.1016/j.bbrc.2020.04.119. Epub 2020 May 20. \(Q1 ranked; impact factor= 3\)](#)

- Pourghadamyari H, Rezaei M, Ipakchi-Azimi A, Eisa-Beygi S, Basiri M, **Tahamtani Y**, Baharvand H. Establishing a new animal model for muscle regeneration studies. [Mol Biol Res Commun. 2019 Dec;8\(4\):171-179. doi: 10.22099/mbr.2019.34611.1433.](#)
- Rassouli H, Sayadmanesh A, Rezaeiani S, Ghezelayagh Z, Gharaati MR, **Tahamtani Y\***. An Easy and Fast Method for Production of Chinese Hamster Ovary Cell Line Expressing and Secreting Human Recombinant Activin A. [Cell journal, 2020.](#)
- Farhadi A, Vosough M, Zhang JS, **Tahamtani Y\***, Shahpasand K. A Possible Neurodegeneration Mechanism Triggered by Diabetes. [Trends Endocrinol Metab. 2019 Aug 7. doi: 10.1016/j.tem.2019.07.012.](#) (Q1 ranked; impact factor= 11.64)
- Vakilian M, **Tahamtani Y**, Ghaedi K. A review on insulin trafficking and exocytosis. [Gene. 2019 Jul 20;706:52-61. doi: 10.1016/j.gene.2019.04.063. Epub 2019 Apr 27.](#) (Q1 ranked; impact factor= 3)
- Soltanian A, Ghezelayagh Z, Mazidi Z, Halvaei M, Mardpour S, Ashtiani MK, Hajizadeh-Saffar E, **Tahamtani Y\***, Baharvand H. Generation of functional human pancreatic organoids by transplants of embryonic stem cell derivatives in a 3D-printed tissue trapper. [J Cell Physiol. 2019 Jun;234\(6\):9564-9576. doi: 10.1002/jcp.27644. Epub 2018 Oct 26.](#) (Q1 ranked; impact factor= 4.52)
- Izadi Z, Hajizadeh-Saffar E, Hadjati J, Habibi-Anbouhi M, Ghanian MH, Sadeghi-Abandansari H, Ashtiani MK, Samsonchi Z, Raoufi M, Moazenchi M, Izadi M, Nejad AsSH, Namdari H, **Tahamtani Y**, Ostad SN, Akbari-Javar H, Baharvand H. Tolerance induction by surface immobilization of Jagged-1 for immunoprotection of pancreatic islets. [Biomaterials. 2018; doi: 10.1016/j.biomaterials.2018.08.017.](#) (Q1 ranked; impact factor= 10.31)
- Mokhber Dezfouli MR, Sadeghian Chaleshtori S, Moradmamand A, Basiri M, Baharvand H, **Tahamtani Y**. Hydrocortisone Promotes Differentiation of Mouse Embryonic Stem Cell-Derived Definitive Endoderm toward Lung Alveolar Epithelial Cells. [Cell J. 2019 Jan;20\(4\):469-476. doi: 10.22074/cellj.2019.5521. Epub 2018 Aug 1.](#)
- Saberzadeh-Ardestani B, Karamzadeh R, Basiri M, Hajizadeh-Saffar E, Farhadi A, Shapiro AMJ, **Tahamtani Y\***, Baharvand H. Type 1 Diabetes Mellitus: Cellular and Molecular Pathophysiology at A Glance. [Cell J. 2018 Oct;20\(3\):294-301. Epub 2018 May 15.](#)
- Basiri M, Behmanesh M, **Tahamtani Y**, Khalooghi K, Moradmamand A, Baharvand H. The Convenience of Single Homology Arm Donor DNA and CRISPR/Cas9-Nickase for Targeted Insertion of Long DNA Fragment. [Cell J. 2017 Winter;18\(4\):532-539. Epub 2016 Sep 26.](#)
- Mokhber Dezfouli MR, Chaleshtori SS, Dehghan MM, Tavanaeimanesh H, Baharvand H, **Tahamtani Y\***. The Therapeutic Potential of Differentiated Lung Cells from Embryonic Stem Cells in Lung Diseases. [Curr Stem Cell Res Ther. 2017;12\(1\):80-84.](#)
- Ashtiani MK, Zandi M, Barzin J, **Tahamtani Y**, Ghanian MH, Moradmamand A, Ehsani M, Nezari H, Larijani MR, Baharvand H. Substrate-mediated commitment of human embryonic stem cells for hepatic differentiation. [J Biomed Mater Res A. 2016 Nov;104\(11\):2861-72. doi: 10.1002/jbm.a.35830. Epub 2016 Jul 22.](#) (Q1 ranked; impact factor= 3.52)
- Montazeri L, Emamia SH, Bonakdar S, **Tahamtani Y**, Hajizadeh-Saffar E, Noori M, Najjar-Asl M, Kazemi-Ashtiani M, Baharvand H. Improvement of islet engraftment by enhanced angiogenesis and microparticle-mediated oxygenation. [Biomaterials. 2016 May; 89:157-65. doi: 10.1016/j.](#) (Q1 ranked; impact factor= 10.31)
- Khosravi-Maharlooei M, Hajizadeh-Saffar E, **Tahamtani Y**, Basiri M, Montazeri L, Khalooghi K, Kazemi Ashtiani M, Farrokhi A, Aghdami N, Sadr Hashemi Nejad A, Larijani MB, De Leu N, Heimberg H, Luo X, Baharvand H. Islet Transplantation for Type 1 Diabetes: So Close and Yet So Far away. [Eur J Endocrinol. 2015 Jun 2.](#) (Q1 ranked; impact factor= 5.30)
- Tahamtan R, Shabestani Monfared A, **Tahamtani Y**, Tavassoli A, Akmal M, Mosleh-Shirazi MA, Naghizadeh MM, Ghasemi D, Keshavarz M, Haddadi GH. Radioprotective effect of melatonin on radiation-induced lung injury and lipid peroxidation in rats. [Cell J. 2015 Spring; 17\(1\):111-20. Epub 2015 Apr 8.](#)
- Hajizadeh E., **Tahamtani Y**, Kazemi M, Shokrgozar MA, Heimberg H, Heremans Y, Baharvand H. Inducible expression of VEGF through human embryonic stem cell-derived mesenchymal stem cells reduces the marginal mass of islet graft in diabetic mice. [Sci Rep. 2015 Mar 30; 5:9322. doi: 10.1038/srep09322. 2015.](#) (Q1 ranked; impact factor= 3.99)

- Basiri M, Behmanesh M, **Tahamtani Y**, Moradmand A, Baharvand H. The effect of small molecule mediated epigenetic modulations on gene overexpression with lentiviral system in embryonic stem cells. [JOURNAL OF CELL & TISSUE \(in Persian\). 2015, Volume 6, Number 3; Page\(s\) 431 To 441.](#)
- Ghasemi M, Azarnia M, Jamali M, Mirabolghasemi G, Nazarian S, Naghizadeh MM, Rajabi M, **Tahamtani Y\***. Protective effects of Ephedra pachyclada extract on mouse models of carbon tetrachloride- induced chronic and acute liver failure. [Tissue Cell. 2014 Feb; 46\(1\): 78-85.](#)
- **Tahamtani Y**, Azarnia M, Farrokhi A, Moradmand A, Mirshahvaladi Sh, Aghdami N, Baharvand H. Stauprimide priming of human embryonic stem cells toward definitive endoderm. [Cell J. 2014 Feb 3; 16\(1\): 63-72.](#)
- **Tahamtani Y**, Azarnia M, Farrokhi A, Sharifi-Zarchi A, Aghdami N, Baharvand H. Treatment of Human Embryonic Stem Cells with Different Combinations of Priming and Inducing Factors Toward Definitive Endoderm. [Stem Cells Dev. 2013 May 1; 22\(9\): 1419-32. \(Q1 ranked; impact factor= 3.14\)](#)
- Azarnia M, Koochesfahani H. M, Rajabi M, **Tahamtani Y**, Tamadon A. Histological examination of endosulfan effects on follicular development of BALB/c mice. [Bulg. J. Vet. Med. 2009, 12, No. 1, 33-41.](#)
- Koochesfahani H. M, Parivar K, **Tahamtani Y**. Effect of Diazinon as a pesticide on oogenesis and ovary structure of balb/c mice strain. [JOURNAL OF SCIENCE KHARAZMI UNIVERSITY \(in Persian\). 2008, Volume 8, Number 2; Page\(s\) 143 To 152.](#)
- Ghezelayagh Z, Zabihi M, Kazemi Ashtiani M, Ghezelayagh Z, Lynn FC, **Tahamtani Y**. Recapitulating pancreatic cell-cell interactions through bioengineering approaches: the momentous role of non-epithelial cells for diabetes cell therapy. [Cell Mol Life Sci. 2021;78\(23\):7107-32.](#)
- Salehpour A, Rezaei M, Khoradmehr A, **Tahamtani Y**, Tamadon A. Which Hyperglycemic Model of Zebrafish (Danio rerio) Suites My Type 2 Diabetes Mellitus Research? A Scoring System for Available Methods. [Frontiers in Cell and Developmental Biology. 2021;9.](#)
- Nouri-Keshtkar M, Taghizadeh S, Farhadi A, Ezaddoustdar A, Vesali S, Hosseini R, et al. Potential Impact of Diabetes and Obesity on Alveolar Type 2 (AT2)-Lipofibroblast (LIF) Interactions After COVID-19 Infection. [Frontiers in Cell and Developmental Biology. 2021;9.](#)
- Mehrzad J, Zahraei Salehi T, Khosravi A, Hosseinkhani S, **Tahamtani Y**, Hajizadeh-Saffar E, et al. Environmentally occurring aflatoxins B1 and M1 notifiably harms pancreatic islets. [Toxin Reviews. 2021:1-10.](#)

### **BOOKS (Written in Farsi Language)**

- Baharvand H, **Tahamtani Y**. *Differentiation of Embryonic Stem Cells*. ISBN: 9786009736977.
- Azarnia M, **Tahamtani Y**, Rajabi M. *Introduction to Animal Reproduction*. ISBN: 978-964-6653-42-9.
- Parivar K, Rajabi M, **Tahamtani Y**. *Vertebrate Embryology (Translated from English)*. ISBN: 978-964-0715-62-8.
- Piryaie A, **Tahamtani Y**, Baharvand H. *Developmental Biology (Translated from English)*. ISBN: 978-600-6926-22-3

### **PATENTS**

- “*Tg(Pdx1-EGFP) transgenic mice*”, Iranian Patent Registry No: 84151, 2014
- “*Highly efficient method for mouse pancreatic islet isolation*”, Iranian Patent Registry No: 84735, 2013.

### **INTERNATIONAL CONFERENCE ABSTRACTS**

- **Tahamtani Y**. Innovative Niche for Stem Cell Research. Oral presentation, Royan 21<sup>st</sup> international virtual stem cell congress, Iran, September 2020.
- Zabihi M, Ghezelayagh Z, Zarkesh I, Vosough M, **Tahamtani Y**. Using Microwell Chip for Scalable Generation of Pancreatic Aggregates. Royan 21<sup>st</sup> international virtual stem cell congress<sup>1</sup>, Iran, September 2020.

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<sup>1</sup> Awarded as the best poster

- Ghezelayagh Z, Zabihi M, Aghayan HR, **Tahamtani Y.** Human fetal pancreas mesenchyme for maturation of human embryonic stem cell derived pancreatic organoids. Royan 21<sup>st</sup> international virtual stem cell congress, Iran, September 2020.
- **Tahamtani Y.** Generation of pancreatic organoids derived from human pluripotent stem cells. Oral presentation, 2<sup>nd</sup> International Youth Conference of Wenzhou Medical University, China, December 2019.
- Shahbazi N, Crawford A, Lotherington L, Sørnum H, Ayyari M, Hosseini F, **Tahamtani Y.** Testing probiotics for their ability to promote pancreatic beta cell regeneration using a microscale in-vivo model of diabetes based on transgenic zebrafish. Royan 15<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2019.
- Farhadi A, Shahpasand K, **Tahamtani Y.** To study Tauo-pathy molecular mechanism upon diabetes. Royan 15<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2019.
- Soltanian A, Mazidi Z, Halvaei M, Mardpour S, Kazemi Ashtiani M, Hajizadeh-Saffar E, Baharvand H, **Tahamtani Y.** Development of pancreatic organoids within a bio-engineered device. Royan 14<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2018.
- Basiri M, Shahbazi E, Asgari B, Moradmand A, Fallahi M, **Tahamtani Y,** Baharvand H. CRISPR-mediated knock-in mouse models for in vivo neural reprogramming and lineage tracing. Royan 13<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2017.
- Shahbazi N, Crawford AD, Lotherington L, Sørnum H, Hosseini FS, **Tahamtani Y.** Towards the identification of bacterial secondary metabolites with pancreatic beta cell regeneration-promoting activity using a microscale in vivo diabetes model in zebrafish. Oral presentation, 4<sup>th</sup> International Conference On Natural Products Utilization, Albena, Bulgaria, May 2019.
- Karami F, Ayaari M, Moazenchi M, Basiri M, Hajizadeh-Saffa E, **Tahamtani Y.** RoyanDiaHerb 1092 promotes proliferation in pancreatic derived islet cells. 7<sup>th</sup> National Congress on Medical Plants, Shiraz, Iran, May 2018.
- Izadi M, Nejad ASH, Moazenchi M, **Tahamtani Y,** Basiri M, Hajizadeh-Saffar E. Mesenchymal stem cell therapy for Type-1 Diabetes mellitus. 2<sup>nd</sup> International Stem cells & Regenerative Medicine Congress, Mashhad, Iran, April 2017.
- Nejad ASH, Moazenchi M, Izadi M, **Tahamtani Y,** Basiri M, Hajizadeh-Saffar E. Clinical islet transplantation for Type-1 Diabetes mellitus. 2<sup>nd</sup> International Stem cells & Regenerative Medicine Congress, Mashhad, Iran, April 2017.
- Soltanian A, **Tahamtani Y,** Moradmand A, Baharvand H. Morphogenesis of human pluripotent stem cell aggregates toward pancreatic progenitors in suspension culture. Royan 11<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2015.
- Noori Kheshtkar M, Kazemi Ashtiani M, Daemi H, Abbas Alizadeh S, Hajizadeh-Saffar E, Sadr Hashemi Nejad, Baharvand H, **Tahamtani Y.** Three-layered alginate capsules for pancreatic islet microencapsulation. Royan 11<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2015.
- Sadeghian Chaleshtori S, Mokhber Dezfouli MR, **Tahamtani Y,** Baharvand H, Jabbari Fakhr M. Generation of pulmonary type ii cells from mouse embryonic stem cells using a novel two-step differentiation protocol. Royan 11<sup>th</sup> International Stem Cell Congress, Tehran, Iran, September 2015.
- Basiri M, Behmanesh M, **Tahamtani Y,** Khalooghi K, Moradmand A, Pournasr B, Baharvand H. Epigenetic modulation of mouse embryonic stem cells along with the forced expression of pancreatic duodenal homeobox-1. Keystone Symposia, USA, March 2015.
- Mokhber Dezfouli MR, Chaleshtori SS, Baharvand H, **Tahamtani Y,** Yadollahi S. Effects of A549-condition medium on mouse embryonic stem cells differentiation into alveolar epithelial type II cells. International congress on stem cells and regenerative medicine, Mashhad, Iran, May 2015.
- Chaleshtori SS, Mokhber Dezfouli MR, Baharvand H, **Tahamtani Y,** Yadollahi S. Differentiation of pulmonary type II cells from mouse embryonic stem cells by basal fibroblast growth factor. International congress on stem cells and regenerative medicine, Mashhad, Iran, May 2015.
- Mokhber Dezfouli MR, Chaleshtori SS, Baharvand H, **Tahamtani Y,** Yadollahi S. IDE2 efficiently direct endodermal differentiation of mouse embryonic stem cells. International congress on stem cells and regenerative medicine, Mashhad, Iran, May 2015.

- Hajizadeh E., **Tahamtani Y**, Kazemi M, Shokrgozar MA, Heimberg H, Heremans Y, Baharvand H. Conditional cell-based and slow-release hydrogel delivery of VEGF to enhance transplanted islet revascularization in diabetic Nude mice. Keystone Symposia, USA, March 2014.
- **Tahamtani Y**, Azarnia M, Aghdami N, Farrokhi A, Moradmand A, Baharvand H. Small Molecule Induction of Human Embryonic Stem Cells Towards Definitive Endoderm. Oral presentation, Royan 9th international stem cell congress, Iran, September 2013.
- **Tahamtani Y**, Azarnia M, Farrokhi A, Aghdami N, Baharvand H. Pre-treatment of human embryonic stem cells with small molecules during definitive endoderm induction. ISSCR, USA, June 2013.
- Moradmand A, Farrokhi A, Khalooghi K, **Tahamtani Y**, Baharvand H. Using a novel mouse Sox17-eGFP embryonic stem cell line to study the cell behaviour during activin induction towards definitive endoderm. ISD Conference, Netherlands, November 2012.
- **Tahamtani Y**, Azarnia M, Aghdami N, Farrokhi A, Baharvand H. Differentiation of rapamycin primed-human embryonic stem cells into pancreatic progenitor cells. ISSCR, Japan, June 2012.
- **Tahamtani Y**, Azarnia M, Aghdami N, Farrokhi A, Baharvand H. Priming of human embryonic stem cells with Rapamycin prior to activin induction leads to efficient differentiation into developmentally competent definitive endoderm. ISD Conference, Netherlands, November 2012.
- **Tahamtani Y**, Azarnia M, Aghdami N, Farrokhi A, Baharvand H. Rapamycin improves the efficiency of directed differentiation of human embryonic stem cells into definitive endoderm. ISSCR, Canada, June 2011.
- **Tahamtani Y**, Azarnia M, Aghdami N, Farrokhi A, Baharvand H. Investigation of different small molecules combinations to produce definitive endoderm from human embryonic stem cells. Cell Symposia, Portugal, December 2011.

#### REVIEWER OF JOURNAL ARTICLES/ RESEARCH PROJECTS

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- Reviewing papers of Cell Journal (>5 Papers)
- One national project reviewed for Council for Development of Stem Cell Sciences and Technologies; Project title: production of human organs in animals using induced pluripotent stem cell technology.
- Reviewing submitted abstracts to Royan International Stem Cell Congress; from 11<sup>th</sup> to 16<sup>th</sup> Congress (2015-2020)
- Reviewing and supervising the projects invested by Lotus Venture Capital Company; 5 projects related to the Cell-Based products.
- Reviewing projects for “Iran National Innovation Fund”.

#### OTHER RESEARCH PROJECTS (last 5 years)

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Title	Responsibility	Date	Funded by
Induction of immune tolerance through islet encapsulation in JAG-1 - conjugated modified alginate microcapsules	Colleague	2016-2018	RI-TMU
Targeting Cell Cycle Regulators to Promote In-vitro Expansion of Human Islet-Derived Beta Cells	Co-director	2016-now	RI-TMU
Production of Insulin Producing Cells from Human Pluripotent Stem Cells in Static Suspension Culture Condition	Director	2015-2017	RI
Co-culture of PDX1+ pancreatic progenitor cells with mesenchymal stem cells and endothelial cells to mimic pancreases tissue geometry	Co-director	2015-2018	RI
Generation of ROSA26 <sup>TO:zfp521</sup> knock-in mouse for inducible expression of ZFP521	Co-director	2015-2017	RI
Islet Encapsulation with Alginate Sulfate Coated Microspheres for Transplantation to Diabetic Mouse Model	Director	2014-2016	RI

<b>Co-transplantation of pancreatic islets and VEGF-expressing Mesenchymal stem cells through hydrogel into diabetic mice</b>	Colleague	<b>2013-2015</b>	RI & IPI
<b>Immobilization of activin A onto nanofibrous substrates for endodermal differentiation of human embryonic stem cells</b>	Colleague	<b>2013-2015</b>	RI
<b>Transplantation of human pancreatic islets for type I diabetes: a phase I clinical trial</b>	Colleague	<b>2013-</b> now	R
<b>Preparation of oxygen generating particles for islet transplantation in diabetic mouse model</b>	Colleague	<b>2013-2016</b>	RI & IPPI

*RI: Royan Institute; IPI: Pasteur Institute of Iran; IPPI: Iran Polymer and Petrochemical Institute; TU: Tehran University; TMU: Tarbiat Modares University*